INDEX OF AUTHORS' NAMES.

TRANSACTIONS. 1915.

A.

Abram, *Harold Helling*. See *Thomas Martin* **Lowry**.

Aitchison, *Leslie*, experiments on the corrosion of molybdenum steel, 1531.

Allmand, *Arthur John*, the distribution of energy in the radiation from the uviol-glass lamp, 682.

Allpress, *Charles Frederick*. See *Frederick* **Challenger**.

Applebey, *Malcolm Percival*, and *William* **Hughes**, the vapour pressures of some saturated aqueous solutions, 1798.

Atkins, *William Ringrose Gelston*, and (*Miss*) *Kathleen* **Shipsey**, the molecular condition of mixed liquids. Part II. Application of Traube's atomic volume method to binary mixtures, 1117.

Atkins, *William Ringrose Gelston*, and (*Miss*) *Edith Gertrude* **Wilson**, the preparation of anhydrous solids, 916.

Auld, *Samuel James Manson*, the reaction between calcium hydroxide and sulphur in aqueous solution, 480.

B.

Baker, *Frank*, obituary notice of, 578.

Baly, *Edward Charles Cyril*, and *Robert Ernest Victor* **Hampson**, the constitution of the aminoazo-compounds, 248.

Baly, *Edward Charles Cyril*, and *Frederick Gerald* **Tryhorn**, the absorption spectra of mono-substituted benzene compounds, and the benzene substitution law, 1058.

the relation between the infra-red and ultra-violet absorption and the variation in absorption with concentration, 1121.

Barger, *George*, and (*Miss*) *Ellen* **Field**, the oxidation of aconitine, 231.

Barger, *George*, and (*Miss*) *Ellen* **Field**, yohimbine (quebrachine), 1025.

Barger, *George*, and *Walter William* **Starling**, blue adsorption compounds of iodine. Parts II. and III. Derivatives of α- and of γ-pyrone, 411.

Barker, *Thomas Vipond*, the valency volume theory, 744.

Barlow, *William*, and *William Jackson* **Pope**, enantiomorphism of molecular and crystal structure, 700.

Bate, *Stanley Charles*. See *Alexander* **McKenzie**.

Baxter, *Robert Reginald*, and *Frederick Daniel* **Chattaway**, *N*-halogen derivatives of the *p*-halogen-substituted benzene sulphonamides, 1814.

Beesley, *Richard Moore*, *Christopher Kelk* **Ingold**, and *Jocelyn Field* **Thorpe**, the formation and stability of *spiro*-compounds. Part I. *Spiro*-compounds from *cyclo*hexane, 1080.

Bennett, *George Macdonald*, the molecular complexity of acetic acid, 351.

Blackman, *Philip*, a comparative method for determining vapour densities, 1500.

Bousfield, *William Robert*, the study of the density and viscosity of aqueous solutions, with special reference to nitric acid. Part I. Densities, 1465.

the study of the density and viscosity of aqueous solutions, with special reference to nitric acid. Part II. Viscosities, 1781.

Boyd, *David Runciman*, the hydrolysis of sodium phenoxides in aqueous solution, 1538.

Bradshaw, *John*, *Henry* **Stephen**, and *Charles* **Weizmann**, condensation of acid chlorides with the ethyl ester of (*a*) cyanoacetic acid, (*b*) malonic acid, and (*c*) acetoacetic acid. Part II. Some experiments on ethyl phthaliminoacetoacetate and ethyl γ-ethoxyacetoacetate, 803.

Brady, *Oscar Lisle*, and *Frederick Percy* **Dunn**, the isomerisation of the oximes. Part VII. 5-Bromovanillinoxime, 5-nitrovanillinoxime, and 6-nitropiperonaloxime, 1858.

Bramley, *Arthur*. See *James Charles* **Philip**.

Brazier, *Sidney Albert*. See *Thomas Slater* **Price**.

Briscoe, *Henry Vincent Aird*, the atomic weight of tin, 63.

C.

Campbell, *Bertram*, contributions to the study of acenaphthylene and its derivatives, 918.

Campbell, *Norman Philip*, velocity of crystallisation from aqueous solutions, 475.

Cardwell, *David*, and *Robert* **Robinson**, note on the nitroguaiacols, 255.

Caspari, *William Augustus*, the behaviour of colloids towards pure and mixed liquids. Part I. The systems: caoutchouc–benzene–alcohol, and caoutchouc–benzene–acetone, 162.

Cauwood, *John Douglas*, and *William Ernest Stephen* **Turner**, the dielectric constants of some organic solvents at their melting or boiling points, 276.

Challenger, *Frederick*, and *Charles Frederick* **Allpress**, organo-derivatives of bismuth. Part II. The stability of derivatives of quinquevalent bismuth, 16.

Chattaway, *Frederick Daniel*, ammonium perhaloids, 105.

the preparation of allyl alcohol, 407.

Chattaway, *Frederick Daniel*, and *William James* **Lambert**, monotropic polymorphic anilides, 1766.

the transition points of the polymorphic phthalylhydrazides, 1773.

Chattaway, *Frederick Daniel*, and *Charles Frederick Byrde* **Pearce**, 2:4-dichlorophenylhydrazine, 32.

Chattaway, *Frederick Daniel*, and *Ernst* **Vonderwahl**, polymorphic phthalyl-halogen-substituted-phenyl- and -tolyl-hydrazides, 1503.

Chattaway, *Frederick Daniel*. See also *Robert Reginald* **Baxter**.

Clarke, *George*, the organic phosphoric acid of wheat; preliminary note, 360.

Clewer, *Hubert William Bentley*, *Stanley Joseph* **Green**, and *Frank* **Tutin**, the constituents of *Gloriosa superba*, 835.

Clibbens, *Douglas Arthur*, and *Maximilian* **Nierenstein**, the action of diazomethane on some aromatic acyl chlorides, 1491.

Clough, *George William*, the optical rotatory power of derivatives of succinic acid in aqueous solutions of inorganic salts. Parts II. and III., 96, 1509.

Cobb, *John William*. See *Harold* **Hollings**.

Cohen, *Julius Berend*, *Joseph* **Marshall**, and *Herbert Ernest* **Woodman**, the disposition of the bonds of the quinquevalent nitrogen atom. Part I., 887.

Cohen, *Julius Berend*, and *Wallace Jennings* **Murray**, studies in orientation; nitration products of 3-chloro-5-bromotoluene, 847.

Collie, *John Norman*, and *Frank* **Reynolds**, the removal of oxygen from triethylphosphine oxide, 367.

Collie, *John Norman*, and *Gerald Noel* **White**, some benzopyranol derivatives, 369.

Copisarow, *Maurice*, and *Charles* **Weizmann**, phthalides of the benzene, naphthalene and carbazole series. Part I., 878.

Crocker, *James Codrington*, the indirect determination of velocity of hydrolysis by the polarimetric method, 1762.

Crofts, *James Murray*, the firing of gases by adiabatic compression. Part III. The ignition-points of mixtures of electrolytic gas with argon; ratio of the specific heat for nitrogen and hydrogen, 290.

the firing of gases by adiabatic compression. Part IV. The ignition-points of mixtures of electrolytic gas with carbon dioxide; ratio of the specific heats for carbon dioxide, 306.

Crossley, *Arthur William*, and *Walter Ryley* **Pratt**, hydroaromatic ketones. Part III. 1-*iso*Propyl*cyclo*hexan-3-one, 171.

Crossley, *Arthur William*, and (*Miss*) *Nora* **Renouf**, dihydric alcohols obtained by the reduction of substituted dihydroresorcins, 602.

Crymble, *Cecil Reginald*, obituary notice of, 579.

Cullis, *Herbert Edwin*. See *Bertram* **Lambert**.

Cumming, *Alexander Charles*. See *Russell Gibson* **Thin**.

D.

Dakin, *Henry Drysdale*, the constitution of allantoin and allied substances, 434.

Datta, *Aswini Kumar*, and *Nilratan* **Dhar**, a new method of finding the second dissociation constants of dilute acids, 824.

Davies, *Thomas Ellis*. See *Nevil Vincent* **Sidgwick**.

Davis, *Oliver Charles Minty*, and *Frederic William* **Rixon**, steric influence; static and dynamic. Part II., 728.

Davis, *William Alfred*, the interaction of perchloric acid and potassium sulphate as an example of reversible change, 1678.

Dawson, *Harry Medforth*, and *Clarence Kenworthy* **Reiman**, the dual theory of acid catalysis; the catalytic activity of monochloroacetic acid in presence of its salts, 1426.

Dawson, *Harry Medforth*, *Reginald* **Sugden**, and *Arthur* **Taylor**, dynamics of isomeric change; keto-enol transformation of cyanoacetic acid and its derivatives, 1030.

Dey, *Biman Bihari*, a study in the coumarin condensation, 1606.

Dhar, *Nilratan*. See *Aswini Kumar* **Datta**.

Dickson, *Thomas William*. See *Thomas Martin* **Lowry**.

Drew, *Harry Dugald Keith*. See *Alexander* **McKenzie**, and *George* **Senter**.

Dunlop, *John Gunning Moore*, obituary notice of, 582.

3-*gem*-dimethylpiperidine, 1712.

Dunn, *Frederick Percy*. See *Oscar Lisle* **Brady**.

Dunstan, *Albert Ernest*, the relation between viscosity and chemical constitution. Part IX. The viscosity and fluidity of the aliphatic acids, 667.

Durrant, *Reginald Graham*, the action of stannous chloride on sulphuric acid and on sulphurous acid, 622.

E.

English, *Solomon*, and *William Ernest Stephen* **Turner**, the freezing-point diagrams of formamide with water and the aliphatic acids and their bearing on the interpretation of viscosity measurements, 774.

Evens, *Eric Doddrell*, *Edgar Cranthorne* **Gifford**, and *Walter Edward Lamborne* **Griffiths**, the action of alkalis on the nitrosoamines of 4-piperidone derivatives, 1673.

F.

Fargher, *Robert George*, and *Reginald* **Furness**, derivatives of 2-pyridylhydrazine and 2-quinolylhydrazine, 688.

Field, (*Miss*) *Ellen*, 3-thiolphenanthrene and some of its derivatives, 1214.

Field, (*Miss*) *Ellen*. See also *George* **Barger**.

Findlay, *Alexander*, and *Owen Rhys* **Howell**, the solubility of carbon dioxide in water in the presence of starch, 282.

Forster, *Martin Onslow*, azotisation of chloroamine, 260.

Forster, *Robert Benjamin*. See *Alfred* **Senier**.

Fowles, *George*, note on the basic copper formates, 1281.

Francis, *Francis Ernest*, *Francis Henry* **Geake**, and *James William* **Roche**, the determination of the concentration of hydroxyl ions, 1651.

Furness, *Reginald*. See *Robert George* **Fargher**.

Fyfe, *Alexander Walker*. See *James Colquhoun* **Irvine**.

G.

Garrett, *Charles Scott*, extinction measurements of solutions of sulphurous acid, sulphites, hydrogen sulphites, and metabisulphites, and of gaseous and liquid sulphur dioxide, 1324.

Geake, *Francis Henry*. See *Francis Ernest* **Francis**.

Ghosh, *Brojendra Nath*, synthesis of α-naphthapyranols, 739.

the influence of constitution on the basic property of oxygen. Part I., 1588.

Ghosh, *Brojendra Nath*, and *Samuel* **Smiles**, nitro-derivatives of dinaphthathioxin, 1144.

Ghosh, *Brojendra Nath*. See also *Serge* **Jacobson**, *Sosale Garalapury* **Sastry**, and *Samuel* **Smiles**.

Gibson, *Charles Stanley*, and *John Lionel* **Simonsen**, resolution of externally compensated *p*-toluenesulphonylalanine into its optically active components, 798.

the resolution of externally compensated tetrahydro-β-naphthaquinaldine into its optically active components, 1148.

Gifford, *Edgar Cranthorne*. See *Eric Doddrell* **Evens**.

Goulding, *Ernest*, and *Oswald Digby* **Roberts**, volatile oil from tubers of *Kaempferia ethelæ*, 314.

Green, *Stanley Joseph*. See *Hubert William Bentley* **Clewer**.

Griffiths, *Walter Edward Lamborne*. See *Eric Doddrell* **Evens**.

H.

Hall, *Norman*, *James Edward* **Hynes**, and *Arthur* **Lapworth**, α-hydroxy-β-phenylcrotonolactone, 132.

Hampson, *Robert Ernest Victor*. See *Edward Charles Cyril* **Baly**.

Harper, *Ernest Magowan*, and *Alexander Killen* **Macbeth**, colorations produced by some organic nitro-compounds with special reference to tetranitromethane, 87.

Haworth, *Walter Norman*, a new method of preparing alkylated sugars, 8.

Heilbron, *Isidor Morris*. See *James Alexander Russell* **Henderson**.

Henderson, *James Alexander Russell*, and *Isidor Morris* **Heilbron**, contributions to our knowledge of the semicarbazones. Part V. Semicarbazones of benzaldehyde and some of its substitution products, 1740.

Hill, *Ernest George*, and *Annoda Prasad* **Sirkar**, the root bark of *Calotropis gigantea*, 1437.

Hill, *John Robertshaw*, mangostin: a crystalline substance allied to the resins, 595.

Hittorf, *Wilhelm*, obituary notice of, 582.

Hogg, *Thomas Percival*. See *James Colquhoun* **Irvine**.

Holley, *William Francis*. See *Raphael* **Meldola**.

Hollings, *Harold*, and *John William* **Cobb**, a thermal study of the carbonisation process, 1106.

Holmes, *John*, contributions to the theory of solutions; the influence of change of volume on specific refraction in mixtures of liquids, 1471.

Howell, *Owen Rhys*. See *Alexander* **Findlay**.

Hughes, *William*. See *Malcolm Percival* **Applebey**.

Hurst, (*Miss*) *Winifred Grace*, and *Jocelyn Field* **Thorpe**, the formation of chlorinated amines by the reduction of nitro-compounds, 934.

Hynes, *James Edward*. See *Norman* **Hall**.

I.

Ingold, *Christopher Kelk*. See *Richard Moore* **Beesley**.

Irvine, *James Colquhoun*, *Alexander Walker* **Fyfe**, and *Thomas Percival* **Hogg**, derivatives of a new form of glucose, 524.

Irvine, *James Colquhoun*, and *James Leslie Auld* **Macdonald**, the formation and preparation of glucosemonoacetone, 1701.

Irvine, *James Colquhoun*, *James Leslie Auld* **Macdonald**, and *Charles William* **Soutar**, condensation of acetone and benzaldehyde with glycerol; preparation of glycerol α-methyl ether, 337.

Irvine, *James Colquhoun*, and (*Miss*) *Ettie Stewart* **Steele**, the influence of configuration on the condensation reactions of polyhydroxy-compounds. Part II. The effect of boric acid on the conductivity and specific rotation of methylated derivatives of mannitol, 1221.

the mechanism of mutarotation in aqueous solution, 1230.

J.

Jacobson, *Serge*, and *Brojendra Nath* **Ghosh**, syntheses of benzo-γ-pyrones and flavones. Parts I., II. and III., 424, 959, 1051.

Jones, *David Trevor*, the thermal decomposition of hydrogenated aromatic hydrocarbons, 1582.

Jones, *David Trevor*, and *Richard Vernon* **Wheeler**, the composition of coal. Part III., 1318.

Jones, (*Miss*) *Marian*, and *James Riddick* **Partington**, experiments on supersaturated solutions, 1019.

Jordan, *Louis Arnold*, and *Jocelyn Field* **Thorpe**, the formation of coumarin derivatives and the preparation of stable coumarinic acids, 387.

Joseph, *Alfred Francis*, solutions of bromine in water, nitrobenzene, and carbon tetrachloride, 1.

K.

Kenyon, *Joseph*, and *Robert Howson* **Pickard**, investigations on the dependence of rotatory power on chemical constitution. Part XI. The co-ordination of the rotatory powers (*a*) of menthyl compounds, (*b*) of the menthones, and (*c*) of the borneols, 35.

investigations on the dependence of rotatory power on chemical constitution. Part XII. The rotatory powers of some esters of benzoic and of 1- and 2-naphthoic acids with optically active secondary alcohols, 115.

King, *Harold*, the synthesis of *p*-thiol-β-phenylethylamine, 222.

Kipping, *Frederic Stanley*. See *John Arthur* **Meads**.

Kletz, (*Miss*) *Leonore*, *Arthur* **Lapworth**, and *Walter* **Sharratt**, synthesis of α-tetronic acid, 1254.

Kolhatkar, *Gopal Balkrishna*, studies on alcoholysis. Part I. Dilatometric determination of the velocity of alcoholysis in the presence of a large excess of alcohol, 921.

Krall, *Hans*, metallic derivatives and constitution of guanidine, 1396.

L.

Lambert, *Bertram*, the wet oxidation of metals. Part IV. The question of passivity, 218.

Lambert, *Bertram*, and *Herbert Edwin* **Cullis**, the wet oxidation of metals. Part III. The corrosion of lead, 210.

Lambert, *William James*. See *Frederick Daniel* **Chattaway**.

Lamble, *Alfred*, and *William Cudmore McCullagh* **Lewis**, studies in catalysis. Part II. The inversion of sucrose, 233.

Lapworth, *Arthur*, some aspects of the theory of acids, 857.

Lapworth, *Arthur*, and *Benjamin Stanley* **Mellor**, condensation of chloromethyl ether with α-alkylacetoacetic esters, 1273.

Lapworth, *Arthur*. See also *Norman* **Hall**, and (*Miss*) *Leonore* **Kletz**.

Le Sueur, *Henry Rondel*, and *John Charles* **Withers**, heneicosoic acid, 736.

Lewis, *William Cudmore McCullagh*. See *Alfred* **Lamble**.

Lowry, *Thomas Martin*, the rotatory dispersive power of organic compounds. Part VIII. An exact definition of normal and anomalous rotatory dispersion, 1195.

Lowry, *Thomas Martin*, and *Harold Helling* **Abram**, the rotatory dispersive power of organic compounds Part VII. Complex rotatory dispersion in methyl tartrate, 1187.

Lowry, *Thomas Martin*, and *Thomas William* **Dickson**, the rotatory dispersive power of organic compounds. Part VI. Complex rotatory dispersion in ethyl tartrate, 1173.

Lowry, *Thomas Martin*, and *Reginald George* **Parker**, the properties of cold-worked metals. Part I. The density of metallic filings, 1005.

Lowry, *Thomas Martin*, and *Victor* **Steele**, nitrocamphor and its derivatives. Part VIII. The action of formamide on nitrocamphor, 1038.

new halogen derivatives of camphor. Part I. *a'*-Chlorocamphor, with a note on isomerism, static and dynamic, 1382.

Lowry, *Thomas Martin*. See also *Reginald George* **Parker**.

M.

McArthur, *Donald Neil*. See *Thomas Stewart* **Patterson**.

Macbeth, *Alexander Killen*, colorations produced by some organic nitro-compounds with special reference to tetranitromethane. Part II., 1824.

Macbeth, *Alexander Killen*. See also *Ernest Magowan* **Harper**.

McCombie, *Hamilton*, and *Harold Archibald* **Scarborough**, the rate of saponification of derivatives of ethyl benzoate, 156.

Macdonald, *James Leslie Auld*. See *James Colquhoun* **Irvine**.

McKee, *James Lyttle*, acetyl derivatives of the diphenylthiosemicarbazides, 1133.

McKenzie, *Alexander*, conversion of racemic acid into a mixture of racemic and *d*-tartaric acids by means of *l*-malic acid, 440.

McKenzie, *Alexander*, and *Stanley Charles* **Bate**, the displacement of halogen in optically active phenylhalogenacetic acids by the anilino-group, 1681.

McKenzie, *Alexander*, *Harry Dugald Keith* **Drew**, and *Gerald Hargrave* **Martin**, conversion of *l*-phenylchloroacetic acid into *d*-diphenylsuccinic acid, 26.

McKenzie, *Alexander*, and (*Miss*) *Nellie* **Walker**, experiments on the Walden inversion. Part X. Displacement reactions with *l*-phenylbromoacetic acid, 1685.

McKenzie, *Alexander*, and (*Miss*) *Sibyl Taite* **Widdows**, the racemisation of phenyl-*p*-tolylacetic acid, 702.

Marshall, *Joseph*, the action of aldehydes on the Grignard reagent. Part II., 509.

Marshall, *Joseph*. See also *Julius Berend* **Cohen**.

Martin, *Geoffrey*, researches on silicon compounds. Part VIII. The preparation and constitution of silico-oxalic acids, and the action of methyl and ethyl alcohols on trisilicon octachloride, 319.

Martin, *Geoffrey*, researches on silicon compounds. Part IX. The action of alkalis and water on hexaethoxysilicoethane, silico-oxalic acid, mesosilicooxalic acid, and chloropentaethoxysilico-ethane, together with some remarks on their constitution, 1043.

Martin, *Gerald Hargrave*. See *Alexander* **McKenzie**.

Meads, *John Arthur*, and *Frederic Stanley* **Kipping**, organic derivatives of silicon. Part XXIII. Further experiments on the so-called siliconic acids, 459.

Medhi, *Vishnu Ram*, and *Edwin Roy* **Watson**, the effect of additional auxochromes on the colour of dyes. Part I. Phthalein and benzein dyes, 1579.

Medhi, *Vishnu Ram*. See also *Edwin Roy* **Watson**.

Meek, *David B.* See *Edwin Roy* **Watson**.

Meldola, *Raphael*, and *William Francis* **Hollely**, alkylated *p*-phenylenediamines and derivatives; quinoneimide-ammonium compounds, 610.

Mellor, *Benjamin Stanley*. See *Arthur* **Lapworth**.

Miles, *Frank Douglas*, a method for the volumetric estimation of lead, 988.

Morgan, *Gilbert Thomas*, and (*Miss*) *Genevieve Violet* **Morrow**, non-aromatic diazonium salts. Part IV. Thiazole-2-diazonium salts, 1291.

Morgan, *Gilbert Thomas*, *Henry Webster* **Moss**, and *James Walker* **Porter**, the absorption spectra of certain aromatic nitroamines and nitroamides. Part II., 1296.

Morgan, *Gilbert Thomas*, and *James Walker* **Porter**, the constitution of internal diazo-oxides (diazophenols), 645.

Morgan, *John Stanley*, a laboratory circulating pump, 1710.

Morrow, (*Miss*) *Genevieve Violet*. See *Gilbert Thomas* **Morgan**.

Moss, *Henry Webster*. See *Gilbert Thomas* **Morgan**.

Müller, *Hugo*, the occurrence of flavone as the farina of the primula, 872.

Murray, *Wallace Jennings*. See *Julius Berend* **Cohen**.

N

Nayak, *Mudlagiri*. See *John Lionel* **Simonsen**.

Newbery, *Edgar*, electromotive forces in alcohol. Part VI. Absolute potentials by the capillary electrometer, 852.

Newbery, *Edgar*, electromotive forces in alcohol. Part VII. Concentration cells with calomel electrodes, 1520.

Nierenstein, *Maximilian*, *iso*quercetone, 869.

an oxidation product of pyrogallol, 1217.

Nierenstein, *Maximilian*. See also *Douglas Arthur* **Clibbens**.

Normand, *Alexander Robert*, the velocity of ionisation at low temperatures, 285.

P

Parker, *Albert*, the velocities of flame in mixtures of methane and air. Part II., 328.

Parker, *Reginald George*, and *Thomas Martin* **Lowry**, the properties of cold-worked metals. Part II. Methods of measuring small changes of density produced by annealing, 1160.

Parker, *Reginald George*. See also *Thomas Martin* **Lowry**.

Parry, *William*, synthesis of pinacones. Part II., 108.

Partington, *James Riddick*. See (*Miss*) *Marian* **Jones**.

Patterson, (*Miss*) *Dorothy Christina*. See *Thomas Stewart* **Patterson**.

Patterson, *Thomas Stewart*, and *Donald Neil* **McArthur**, the rotation of *iso*butyl diacetyl-*d*-tartrate, 814.

Patterson, *Thomas Stewart*, and (*Miss*) *Dorothy Christina* **Patterson**, studies in optical superposition. Part IV. *l*-Menthylamine tartrates and *l*-amyl dimethoxysuccinates, 142.

Peacock, *David Henry*, the structure of methyleneglycerol and cinnamylideneglycerol; preliminary note, 815.

rotatory power and refractivity. Part II. The rotatory powers, refractivities, and molecular solution volumes of camphor, bromocamphor, and ethyl tartrate in certain solvents, 1547.

Pearce, *Charles Frederick Byrde*. See *Frederick Daniel* **Chattaway**.

Perkin, *Arthur George*, and *Edwin Roy* **Watson**, addition of auxochromes in the flavone group, 198.

Perkin, *William Henry*, presidential address, 557.

Philip, *James Charles*, and *Arthur* **Bramley**, influence of sucrose and alkali chlorides on the solvent power of water, 377.

influence of glycerol, dextrose, alkali nitrates and sulphates, and ammonium salts on the solvent power of water, 1831.

Pickard, *Robert Howson.* See *Joseph* **Kenyon.**
Pickering, *Spencer Percival Umfreville,* metallo-compounds of cobalt and nickel, 942.
metallo-compounds in solution, 955.
Pope, *William Jackson.* See *William* **Barlow.**
Porter, *James Walker.* See *Gilbert Thomas* **Morgan.**
Powell, *Charles Wilfrid Roberts,* the action of alkalis on dextrose and lævulose, 1335.
Powis, *Frank,* negative colloidal ferric hydroxide, 818.
Pratt, *Walter Ryley.* See *Arthur William* **Crossley.**
Price, *Thomas Slater,* and *Sidney Albert* **Brazier,** complex metallic ammines. Part I. *cis*-Sulphonyldiacetatodiethylenediaminecobaltic salts, 1367.
complex metallic ammines. Part II. Additive compounds formed from *trans*-dichlorodiethylenediaminecobaltic chloride, 1713.
Price, *Tudor Williams,* osmotic pressure of alcoholic solutions. Part I. Vapour pressures and densities, 188.
Purvis, *John Edward,* the absorption spectra of various halogen and nitrile derivatives of benzene and toluene as vapours and in solution, 496.
the absorption spectra of the isomerides of ammonium *d*-α-bromocamphor-β-sulphonate, 643.
the absorption spectra of the vapours and solutions of anisole, phenetole, and various derivatives, 660.
the absorption spectra of various derivatives of benzoic acid, 966.
Pyman, *Frank Lee, iso*quinoline derivatives. Part VIII. The constitution of the reduction products of papaverine (*continued*). The constitution of pavine, 176.

R.

Rae, *William Norman,* the action of bromine on the alkali iodides, 1286.
Rakshit, *Jitendra Nath,* preparation of dichlorodinitromethane by the simultaneous nitration and chlorination of acetone, 1115.
Ray, *Prafulla Chandra,* interaction of dimercuriammonium nitrite and the alkyl iodides, 1251.
Reiman, *Clarence Kenworthy.* See *Harry Medforth* **Dawson.**
Renouf, (*Miss*) *Nora.* See *Arthur William* **Crossley.**
Report of the Council, 542.
Report of the International Committee on Atomic Weights, 1282.
Reynolds, *Frank.* See *John Norman* **Collie.**
Riley, *Edward,* obituary notice of, 586.
Rixon, *Frederic William.* See *Oliver Charles Minty* **Davis.**
Roberts, *Oswald Digby,* the volatile oil of *Cymbopogon sennaarensis,* Chiov, 1465.
Roberts, *Oswald Digby.* See also *Ernest* **Goulding.**
Robertson, *Philip Wilfrid,* a new method of estimating bromine and chlorine in organic compounds, 902.
Robinson, (*Mrs.*) *Gertrude Maud,* a reaction of homopiperonyl and of homoveratryl alcohols, 267.
Robinson, (*Mrs.*) *Gertrude Maud,* and *Robert* **Robinson,** a decomposition of certain *o*-nitromandelic acids, 1753.
Robinson, *Robert.* See *David* **Cardwell,** and (*Mrs.*) *Gertrude Maud* **Robinson.**
Roche, *James William.* See *Francis Ernest* **Francis.**
Russell, *Edward John,* the principles of crop production, 1838.

S.

Sastry, *Sosale Garalapury,* the catalytic bleaching of palm oil, 1828.
Sastry, *Sosale Garalapury,* and *Brojendra Nath* **Ghosh,** condensation of aromatic hydroxyaldehydes with diketohydrindene, 1442.
Scarborough, *Harold Archibald.* See *Hamilton* **McCombie.**
Sell, *William James,* obituary notice of, 593.
Sen, *Kumud Behari.* See *Edward Roy* **Watson.**
Sen-Gupta, *Hemendra Kumar,* the formation of heterocyclic compounds from cyanoacetamide and hydroxymethylene ketones. Part I., 1347.
Senier, *Alfred,* and *Robert Benjamin* **Forster,** studies in phototropy and thermotropy. Part VI. Polymorphic vanillylidenearylamines produced by trituration and by the influence of actinic light, 452.
studies in phototropy and thermotropy. Part VII. Polymorphic anisylidenearylamines produced by trituration and by the influence of actinic light, 1168.
Senter, *George,* studies on the Walden inversion. Part II. The kinetics and dissociation constant of phenylchloroacetic acid, 908.

Senter, *George*, and *Harry Dugald Keith* **Drew**, studies on the Walden inversion. Part I. The influence of the solvent on the sign of the product in the conversion of phenylchloroacetic acid to phenylaminoacetic acid, 638.

Senter, *George*, and *Henry* **Wood**, reactivity of the halogens in organic compounds. Part VIII. Interaction of alkalis and alkali bromoacetates and bromopropionates in methyl-alcoholic solution, 1070.

Sharratt, *Walter*. See (*Miss*) *Leonore* **Kletz**.

Shipsey, (*Miss*) *Kathleen*. See *William Ringrose Gelston* **Atkins**.

Sidgwick, *Nevil Vincent*, a method for distinguishing tautomeric, isomeric, and polymeric from polymorphic substances, 672.

Sidgwick, *Nevil Vincent*, *William James* **Spurrell**, and *Thomas Ellis* **Davies**, the solubility of the nitrophenols and other isomeric disubstitution products of benzene, 1202.

Sidgwick, *Nevil Vincent*. See also *Bernard Howell* **Wilsdon**.

Simonsen, *John Lionel*, syntheses with the aid of monochloromethyl ether. Part III. The action of monochloromethyl ether on the sodium derivatives of ethyl ethane-$\alpha\beta\beta$-tricarboxylate, ethyl butane-$\alpha\alpha\delta\delta$-tetracarboxylate, and ethyl pentane-$\alpha\alpha\epsilon\epsilon$-tetracarboxylate, 783.

Simonsen, *John Lionel*, and *Mudlagiri* **Nayak**, condensation of ethyl cyanoacetate and acetylacetone, 792.

the nitration of 3-acetylamino-2-methoxytoluene, 828.

Simonsen, *John Lionel*. See also *Charles Stanley* **Gibson**.

Sirkar, *Annoda Prasad*. See *Ernest George* **Hill**.

Sirker, *Arabinda*, action of Grignard's reagent on hydroxyketonic dyestuffs and their ethers, 1241.

Smiles, *Samuel*, and *Brojendra Nath* **Ghosh**, syntheses of derivatives of 3-oxy(1)thionaphthen, 1377.

Smiles, *Samuel*. See also *Brojendra Nath* **Ghosh**.

Soutar, *Charles William*. See *James Colquhoun* **Irvine**.

Spencer, *James Frederick*, studies on cerium compounds. Part I. Basic ceric sulphates and the colour of cerium dioxide, 1265.

Spurrell, *William James*. See *Nevil Vincent* **Sidgwick**.

Starling, *Walter William*. See *George* **Barger**,

Steele, (*Miss*) *Ettie Stewart*. See *James Colquhoun* **Irvine**.

Steele, *Victor*. See *Thomas Martin* **Lowry**.

Stephen, *Henry*. See *John* **Bradshaw**.

Still, *Charles James*. See *Henry* **Wren**.

Sugden, *Reginald*. See *Harry Medforth* **Dawson**.

T.

Taylor, *Arthur*. See *Harry Medforth* **Dawson**.

Thin, *Russell Gibson*, and *Alexander Charles* **Cumming**, the estimation of potassium by the perchlorate method, 361.

Thomas, *Joseph William*, obituary notice of, 588.

Thorpe, *Jocelyn Field*. See *Richard Moore* **Beesley**, (*Miss*) *Winifred Grace* **Hurst**, and *Louis Arnold* **Jordan**.

Tryhorn, *Frederick Gerald*. See *Edward Charles Cyril* **Baly**.

Tschugaev, *Leo Alexandrovitsch*, a new method of preparing chloro- and bromotriammino-platinous haloids (Cleve's salts), 1247.

Turner, *Eustace Ebenezer*, the formation of dialkyloxyanilines in reduction processes, 469.

the behaviour of nitriles towards organo-metallic derivatives of magnesium, 1459.

studies in ring formation. Part I. The Kaufler formula for derivatives of diphenyl, 1495.

Turner, *William Ernest Stephen*. See *John Douglas* **Cauwood**, and *Solomon* **English**.

Tutin, *Frank*, *iso*dibenzoylglucoxylose, 7.

Tutin, *Frank*. See also *Hubert William Bentley* **Clewer**.

V.

Vonderwahl, *Ernst*. See *Frederick Daniel* **Chattaway**.

W.

Walker, (*Miss*) *Nellie*. See *Alexander* **McKenzie**.

Watson, *Edwin Roy*, and *David B.* **Meek**, the nature of the vibrations causing the colour of dyes, 1567.

Watson, *Edwin Roy*, *Kumud Behari* **Sen**, and *Vishnu Ram* **Medhi**, conversion of the natural flavone colouring matters into pyranol dyes, 1477.

Watson, *Edwin Roy*. See also *Vishnu Ram* **Medhi**, and *Arthur George* **Perkin**.

Weizmann, *Charles*. See *John* **Bradshaw**, and *Maurice* **Copisarow**.

Werner, *Emil Alphonse*, the constitution of carbamides. Part II. The relation of cyanamide to urea; the constitution of cyanamide and the mechanism of its polymerisation, 715.

Weston, *Frank Edwin*, the preparation of ethyl bromide, 1489.

Wheeler, *Richard Vernon*. See *David Trevor* **Jones**.

White, *Gerald Noel*. See *John Norman* **Collie**.

Widdows, (*Miss*) *Sibyl Taite*. See *Alexander* **McKenzie**.

Williamson, *Robert*, obituary notice of, 590.

Wilsdon, *Bernard* **Howell**, and *Nevil Vincent* **Sidgwick**, the rate of hydration of camphoric anhydride, 679.

Wilson, (*Miss*) *Edith Gertrude*. See *William Ringrose Gelston* **Atkins**.

Withers, *John Charles*. See *Henry Rondel* **Le Sueur**.

Wood, *Henry*. See *George* **Senter**.

Woodman, *Herbert Ernest*. See *Julius Berend* **Cohen**.

Wren, *Henry*, and *Charles James* **Still**, configuration of the stereoisomeric diphenylsuccinic acids, 444.

studies in the phenylsuccinic acid series. Part II. Some derivatives of the optically active diphenylsuccinic acids, 1449.

Wright, *Robert*, vapour-pressure investigations of the fusion products of iodine with sulphur, selenium, and tellurium, 1527.

INDEX OF SUBJECTS.

TRANSACTIONS. 1915.

Single organic compounds of known empirical formula will be found in the Formula Index, p. 1879.

A.

Acids, theory of (LAPWORTH), 857.
aliphatic, viscosity and fluidity of (DUNSTAN), 667.
freezing-point diagrams of mixtures of formamide with water and (ENGLISH and TURNER), 774.
dibasic, dissociation constants of (DATTA and DHAR), 824.
Acid chlorides, condensation of, with ethyl acetoacetate, ethyl cyanoacetate, and ethyl malonate (BRADSHAW, STEPHEN, and WEIZMANN), 803.
Aconitine, $C_{34}H_{47}O_{11}N$.
Acyl chlorides, aromatic, action of diazomethane on (CLIBBENS and NIERENSTEIN), 1491.
Address, presidential (PERKIN), 557.
Akundaric acid, $C_{35}H_{60}O_3$.
Akundarol, $C_{29}H_{52}O_2$.
Alcoholysis, studies in (KOLHATKAR), 921.
Aldehydes, action of, on Grignard reagents (MARSHALL), 509.
Alkali chlorides, influence of, on the solvent power of water (PHILIP and BRAMLEY), 377.
iodides, action of bromine on (RAE), 1286.
Alkyl iodides, action of, on dimercuriammonium nitrite (RÂY), 1251.
Allantoin, $C_4H_6O_3N_4$.
Amines, chlorinated, formation of (HURST and THORPE), 934.
Aminoazo-compounds, constitution of (BALY and HAMPSON), 248.
Ammines, complex metallic (PRICE and BRAZIER), 1367, 1713.
Ammonium *per*haloids (CHATTAWAY), 105.
Anilides, polymorphic (CHATTAWAY and LAMBERT), 1766.
Anisole, C_7H_8O.
Annual General Meeting, 542.
Argon, ignition of mixtures of electrolytic gas and (CROFTS), 290.
Atmospheric air, velocity of ignition of mixtures of methane and (PARKER), 328.
Atomic weight of tin (BRISCOE), 63.
Atomic weights, report of the International Committee on, 1282.
table of, 1285.

B.

Balance sheets of the Chemical Society and of the Research Fund. See Annual General Meeting, 542.
Benzenesulphon-amides and **-anilides**, *p*-halogen-substituted, *N*-halogen derivatives of (BAXTER and CHATTAWAY), 1814.
γ-Benzopyrones, syntheses of (JACOBSON and GHOSH), 424, 959, 1051.
Bismuth organic compounds (CHALLENGER and ALLPRESS), 16.
Borneols, $C_{10}H_{18}O$.
Bromine, solutions of, in water, nitrobenzene and carbon tetrachloride (JOSEPH), 1.
action of, on alkali iodides (RAE), 1286.
estimation of, in organic compounds (ROBERTSON), 902.

C.

Calcium hydroxide, reaction between sulphur and (AULD), 480.
Calotropis gigantea, constituents of the root bark of (HILL and SIRKAR), 1437.
Camphor, $C_{10}H_{16}O$.
Camphoric anhydride, $C_{10}H_{14}O_3$.
Caoutchouc, equilibrium in the systems, benzene, alcohol and, and benzene, acetone and (CASPARI), 162.
Carbamides, constitution of (WERNER), 715.
Carbon *di*oxide, ratio of specific heats for hydrogen and (CROFTS), 306.

Carbon *di*oxide, solubility of, in water, in presence of starch (FINDLAY and HOWELL), 282.
ignition of mixtures of electrolytic gas and (CROFTS), 306.
Catalysis, studies in (LAMBLE and LEWIS), 233.
acid, theory of (DAWSON and REIMAN), 1426.
Cells, electrochemical, with calomel electrodes (NEWBERY), 1520.
Cerium compounds (SPENCER), 1215.
Chemical constitution and rotatory power (KENYON and PICKARD), 35, 115.
and viscosity, relation between (DUNSTAN), 667.
Chlorine:—
Perchloric acid, interaction of potassium sulphate and (DAVIS), 1678.
Chlorine, estimation of, in organic compounds (ROBERTSON), 902.
Chloroamine, azotisation by (FORSTER), 260.
Cinnamic acid, $C_9H_8O_2$.
Coal, composition of (JONES and WHEELER), 1318.
distillation of (HOLLINGS and COBB), 1106.
Cobalt organic compounds (PICKERING), 942.
Colloids, action of, with liquids (CASPARI), 162.
Colouring matters, absorption spectra of (WATSON and MEEK), 1567; (MEDHI and WATSON), 1579.
hydroxyketonic, action of Grignard's reagent on, and their ethers (SIRKER), 1241.
spiro-**Compounds**, formation and stability of (BEESLEY, INGOLD, and THORPE), 1080.
Copper organic compounds (PICKERING), 956.
Coumarin derivatives, preparation of (JORDAN and THORPE), 387.
Coumarin condensation (DEY), 1606.
Crop production, principles of (RUSSELL), 1838.
Crystallisation, velocity of. See Velocity.
Crystals, optical activity and enantiomorphism of (BARLOW and POPE), 700.
Cymbopogon sennarensis, constituents of the oil of (ROBERTS), 1465.

D.

Density of aqueous solutions (BOUSFIELD), 1405.
of metallic filings (LOWRY and PARKER), 1005.
Deputation from the Royal Society, and the Chemical Society to the Government, 974.
Dialkyloxyanilines, formation of, in reduction processes (TURNER), 469.
Diazonium salts, action of chloroamine and of sodium hypochlorite on (FORSTER), 263.
non-aromatic (MORGAN and MORROW), 1291.
Diazo-oxides, internal (*diazophenols*), constitution of (MORGAN and PORTER), 645.
*iso***Dibenzoylglucoxylose**, $C_{25}H_{28}O_{12}$.
Dielectric constants of organic solvents (CAUWOOD and TURNER), 276.
Dihydroresorcinols. See *cyclo*Hexane-1:3-diones.
Diketohydrindene, $C_9H_6O_2$.
Dimercuriammonium nitrite, action of alkyl iodides with (RÂY), 1251.
Diphenyl derivatives, Kaufler formula for (TURNER), 1495.
Diphenylthiosemicarbazides, $C_{13}H_{13}N_3S$.
Dispersion, rotatory, of organic compounds (LOWRY and DICKSON), 1173; (LOWRY and ABRAM), 1187; (LOWRY), 1195.

E.

Electrometer, capillary, measurement of potentials by means of the (NEWBERY), 852.
Electromotive force, measurement of, in alcohol (NEWBERY), 852, 1520.
Enantiomorphism and optical activity of molecular and crystal structure (BARLOW and POPE), 700.

F.

Flavones, syntheses of (JACOBSON and GHOSH), 424, 959, 1051.
Flavone colouring matters, conversion of, into pyranol colouring matters (WATSON, SEN, and MEDHI), 1477.
Flavone group, addition of auxochromes in the (PERKIN and WATSON), 198.
Freezing-point determinations of mixtures of formamide with water and aliphatic acids (ENGLISH and TURNER), 774.

G.

Gas, electrolytic, ignition of mixtures of argon and (CROFTS), 290.
ignition of mixtures of carbon dioxide and (CROFTS), 306.
Gases, ignition of, by adiabatic compression (CROFTS), 290, 306.

Gloriosa superba, constituents of (CLEWER, GREEN, and TUTIN), 835.
Grignard reagents, action of aldehydes on (MARSHALL), 509.
action of, on hydroxyketonic colouring matters and their ethers (SIRKER), 1241.

H.

Halogens, reactivity of, in organic compounds (SENTER and WOOD), 1070.
Heneicosoamide, $C_{21}H_{43}ON$.
Heterocyclic compounds, formation of (SEN-GUPTA), 1347.
*cyclo***Hexane-1:3-diones**, substituted, reduction of (CROSSLEY and RENOUF), 602.
Homopiperonyl alcohol, $C_8H_8O_3$.
Homoveratryl alcohol, $C_9H_{12}O_3$.
1-Homoveratryl-1:5:6:trimethoxyindene, $C_{21}H_{24}O_5$.
Hydrocarbons, hydrogenated aromatic, thermal decomposition of (JONES), 1582.
Hydrogen, ratio of specific heats for carbon dioxide and (CROFTS), 306.
ratio of the specific heats of nitrogen and (CROFTS), 290.
Hydroxyl ions, measurement of the concentration of (FRANCIS, GEAKE, and ROCHE), 1651.
Hydroxy-aldehydes, aromatic condensation of diketohydrindene with (SASTRY and GHOSH), 1442.
Hydroxy-compounds, influence of configuration on the condensation of (IRVINE and STEELE), 1221.

I.

Ignition of gases by adiabatic compression (CROFTS), 290, 306.
Iodine, fusion of, with selenium, with sulphur, and with tellurium (WRIGHT), 1527.
compounds of, with organic substances (BARGER and STARLING), 411.
Ionisation, velocity of. See Velocity.
Iron, passivity of (LAMBERT), 218.
Ferric hydroxide, colloidal negative (POWIS), 818.
Isomerism, distinction between polymorphism and (SIDGWICK), 672.

K.

Kaempferia ethelæ, volatile oil from tubers of (GOULDING and ROBERTS), 314.
Ketones, hydroaromatic (CROSSLEY and PRATT), 171.
*iso*nitroso-, action of chloroamine on (FORSTER), 265.

L.

Lamp, mercury Uviol-glass, distribution of energy in (ALLMAND), 682.
Lead, corrosion of (LAMBERT and CULLIS), 210.
estimation of, volumetrically (MILES), 988.
Lecture delivered before the Chemical Society (RUSSELL), 1838.
Light, relation between absorption of infra-red and ultra-violet, and the variation with concentration (BALY and TRYHORN), 1121.
Liquids, action of colloids with (CASPARI), 162.
mixed, influence of change of volume on the specific refraction of (HOLMES), 1471.
viscosity and freezing-point determinations of (ENGLISH and TURNER), 774.
application of Traube's atomic volume method to (ATKINS and SHIPSEY), 1117.

M.

Magnesium organic compounds, action of nitriles with (TURNER), 1459.
Mandelic acid, $C_8H_8O_3$.
Mangostin, $C_{23}H_{24}O_6$.
Mannitol, $C_6H_{14}O_6$.
Memorial of the Chemical Society to the Government on the position of chemical industries, 985.
of the Royal Society to the Prime Minister on the development of chemical industries, 982.
Menthones, $C_{10}H_{18}O$.
Menthyl derivatives, rotation of (KENYON and PICKARD), 35.
Metallic filings, density of (LOWRY and PARKER), 1005.
Metallo-compounds (PICKERING), 942, 955.
Metals, wet oxidation of (LAMBERT and CULLIS), 210; (LAMBERT), 218.
cold-worked, properties of (LOWRY and PARKER), 1005, 1160.
N-**Methylpavinemethine**, $C_{22}H_{37}O_4N$.
Molecular structure, optical activity and enantiomorphism of (BARLOW and POPE), 700.
Molybdenum steel, corrosion of (AITCHISON), 1531.

Morin, amino-, $C_{15}H_{11}O_7N$.
Mudaric acid, $C_{30}H_{46}O_3$.
Mudarol, $C_{30}H_{48}O_2$.
Mutarotation in aqueous solution, mechanism of (IRVINE and STEELE), 1230.

N.

α-Naphthapyranols, synthesis of (GHOSH), 739.
Nickel organic compounds (PICKERING), 942.
Nitriles, action of, on magnesium organic compounds (TURNER), 1459.
Nitroamides, aromatic, absorption spectra of (MORGAN, MOSS, and PORTER), 1296.
Nitroamines, aromatic, absorption spectra of (MORGAN, MOSS, and PORTER), 1296.
Nitro-compounds, reduction of (HURST and THORPE), 934.
colour reactions of (HARPER and MACBETH), 87; (MACBETH), 1824.
Nitrogen, ratio of the specific heats of hydrogen and (CROFTS), 290.
Nitric acid, density of solutions of (BOUSFIELD), 1407.
viscosity of solutions of (BOUSFIELD), 1781.
Nitrogen atom, quinquevalent, structure of (COHEN, MARSHALL, and WOODMAN), 887.

O.

Obituary notices:—
Frank Baker, 578.
Cecil Reginald Crymble, 579.
John Gunning Moore Dunlop, 582.
Wilhelm Hittorf, 582.
Edward Riley, 586.
William James Sell, 593.
Joseph William Thomas, 588.
Robert Williamson, 590.
Optical activity and enantiomorphism of molecular and crystal structure (BARLOW and POPE), 700.
inversion, Walden's (SENTER and DREW), 638; (SENTER), 908; (MCKENZIE and WALKER), 1685.
superposition, studies in (T. S. and D. C. PATTERSON), 142.
Organic chemical industry, position of the (PERKIN), 557.
Organic compounds, rotatory dispersion of (LOWRY and DICKSON), 1173; (LOWRY and ABRAM), 1187; (LOWRY), 1195.
reactivity of halogens in (SENTER and WOOD), 1070.
compounds of iodine and (BARGER and STARLING), 411.
Organic compounds, aromatic, orientation in (COHEN and MURRAY), 847.
estimation of bromine and chlorine in (ROBERTSON), 902.
Osmotic pressure of alcoholic solutions (PRICE), 188.
Oximes, isomerism of (BRADY and DUNN), 1858.
Oxygen, influence of constitution on the basic properties of (GHOSH), 1588.

P.

Palm oil, catalytic bleaching of (SASTRY), 1828.
Papaverine, $C_{20}H_{21}O_4N$.
Pavine, $C_{20}H_{23}O_4N$.
Perchloric acid. See under Chlorine.
Phenetole, $C_8H_{10}O$.
Phenoxides, sodium, hydrolysis of (BOYD), 1538.
p-**Phenylenediamines**, alkylated (MELDOLA and HOLLELY), 610.
Phenylhalogenacetic acids, optically active, displacement of halogen in, by the anilino-group (MCKENZIE and BATE), 1681.
Phenylpropiolic acid, $C_9H_6O_2$.
Phenylsuccinic acid series, studies in the (WREN and STILL), 1449.
Phosphorus:—
Phosphoric acid, organic, of wheat (CLARKE), 360.
Phototropy, studies in (SENIER and FORSTER), 452, 1168.
Phthalides, synthesis of (COPISAROW and WEIZMANN), 878.
Phthalylhydrazides, polymorphic (CHATTAWAY and LAMBERT), 1773.
Pinacones, synthesis of (PARRY), 108.
Platinum, preparation of bromo- and chloro-triammino-haloids of (TSCHUGAEV), 1247.
Polymorphic substances, distinction of tautomeric, isomeric, and polymeric from (SIDGWICK), 672.
Potassium sulphate, interaction of perchloric acid and (DAVIS), 1678.
estimation of, by the perchlorate method (THIN and CUMMING), 361.
Potential, measurement of, by means of the capillary electrometer (NEWBERY), 852.
Primula, occurrence of flavone as the farina of (MÜLLER), 872.
Pump, laboratory circulating (MORGAN), 1710.
Pyranol colouring matters, production of, from flavone colouring matters (WATSON, SEN, and MEDHI), 1477.
Pyrones, $C_5H_4O_2$.

Q.

Quebrachine. See Yohimbine.
iso-**Quinoline** derivatives (PYMAN), 176.
Quinoneimide-ammonium compounds (MELDOLA and HOLLELY), 610.

R.

Refraction, influence of change of volume on the, of mixed liquids (HOLMES), 1471.
Refractivity and rotatory power (PEACOCK), 1547.
Ring formation, studies in (TURNER), 1495.
Rotatory power and chemical constitution (KENYON and PICKARD), 35, 115.
and refractivity (PEACOCK), 1547.

S.

Selenium, fusion of iodine and (WRIGHT), 1527.
Semicarbazones (HENDERSON and HEILBRON), 1740.
Silicon compounds (MARTIN), 319.
Trisilicon *octa*chloride, action of ethyl and methyl alcohols on (MARTIN), 319.
Silicon organic compounds (MEADS and KIPPING), 459; (MARTIN), 1043.
Siliconic acids, so-called, experiments with (MEADS and KIPPING), 459.
Silico-oxalic acids, preparation and constitution of (MARTIN), 319.
action of alkalis and water on (MARTIN), 1043.
Solids, anhydrous, preparation of (ATKINS and WILSON), 916.
Solutions, theory of (HOLMES), 1471.
alcoholic, osmotic pressure of (PRICE), 188.
aqueous, density and viscosity of (BOUSFIELD), 1405.
saturated, vapour pressures of (APPLEBEY and HUGHES), 1798.
supersaturated (JONES and PARTINGTON), 1019.
Solvents, organic, dielectric constants of, at their melting or boiling points (CAUWOOD and TURNER), 276.
Spectra, absorption, of aminoazo-compounds (BALY and HAMPSON), 248.
of benzene derivatives (BALY and TRYHORN), 1058.
of colouring matters (WATSON and MEEK), 1567; (MEDHI and WATSON), 1579.
Spectra, absorption, of halogen and nitrile derivatives of benzene and toluene (PURVIS), 496.
nitroamines and nitroamides (MORGAN, MOSS, and PORTER), 1296.
Stannous chloride. See under Tin.
Steel. See Molybdenum steel.
Steric influence (DAVIS and RIXON), 728.
Sugars, alkylation of (HAWORTH), 8.
Sulphur, reaction between calcium hydroxide and (AULD), 480.
fusion of iodine and (WRIGHT), 1527.
*di*oxide, gaseous and liquid, absorption spectra of (GARRETT), 1324.
Sulphuric acid, action of stannous chloride on (DURRANT), 622.
Sulphurous acid, absorption spectra of, and of its salts (GARRETT), 1324.
action of stannous chloride on (DURRANT), 622.

T.

Tautomerism, distinction between polymorphism and (SIDGWICK), 672.
Tellurium, fusion of iodine and (WRIGHT), 1527.
Tetrahydro-β-naphthaquinaldine, $C_{14}H_{15}N$.
Thermotropy, studies in (SENIER and FORSTER), 452, 1168.
Tin, atomic weight of (BRISCOE), 63.
Stannous chloride, action of, on sulphuric and sulphurous acids (DURRANT), 622.
Trimethylcoumarin, $C_{12}H_{12}O_2$.

V.

Valency volume, theory of (BARKER), 744.
Vapour density, determination of (BLACKMAN), 1500.
Vapour pressure of saturated aqueous solutions (APPLEBEY and HUGHES), 1798.
Velocity of alcoholysis, determination of (KOLHATKAR), 921.
Velocity of crystallisation from aqueous solutions (CAMPBELL), 475.
Velocity of hydrolysis, determination of, polarimetrically (CROCKER), 1762.
Velocity of ignition of mixtures of methane and air (PARKER), 328.
Velocity of ionisation at low temperatures (NORMAND), 285.
Viscometer, improved (BOUSFIELD), 1782.

Viscosity and chemical constitution, relation between (DUNSTAN), 667.
of aqueous solutions (BOUSFIELD), 1405, 1781.

W.

Walden inversion, studies on (SENTER and DREW), 638; (SENTER), 908; (MCKENZIE and WALKER), 1685.

Water, influence of added substances on the solvent power of (PHILIP and BRAMLEY), 377, 1831.
Wheat, organic phosphoric acid of (CLARKE), 360.

Y.

Yohimbic acid, $C_{21}H_{22}O_3N_2$.
Yohimbine, $C_{22}H_{26}O_3N_2$.

FORMULA INDEX.

THE following index of organic compounds of known empirical formula is arranged according to Richter's system (see *Lexikon der Kohlenstoff-Verbindungen*).

The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C_1 group, C_2 group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C_1 Group.

CH_4 Methane, velocity of ignition of mixtures of atmospheric air and (PARKER), 328.

CO_2 Carbon dioxide, ratio of specific heats for hydrogen and (CROFTS), 306; solubility of, in water, in presence of starch (FINDLAY and HOWELL), 282; ignition of mixtures of electrolytic gas and (CROFTS), 306.

1 II

CH_2O_2 Formic acid, basic copper salts (FOWLES), 1281.

CH_2N_2 Cyanamide, constitution, polymerisation and hydrolysis of (WERNER), 715.

Diazomethane, action of, on aromatic acyl chlorides (CLIBBENS and NIERENSTEIN), 1491.

CH_5N_3 Guanidine, constitution and metallic derivatives of (KRALL), 1396.

CO_8N_4 Tetranitromethane, colour reactions of (HARPER and MACBETH), 87; (MACBETH), 1824.

1 III

CH_3ON Formamide, freezing-point diagrams of mixtures of, with water and aliphatic acids (ENGLISH and TURNER), 774.

$CO_4N_2Cl_2$ Dichlorodinitromethane, preparation of (RAKSHIT), 1115.

C_2 Group.

$C_2H_4O_2$ Acetic acid, molecular complexity of (BENNETT), 351.

C_2H_5Br Ethyl bromide, preparation of (WESTON), 1489.

C_2H_6O Ethyl alcohol, equilibrium of benzene, caoutchouc and (CASPARI), 162.

2 III

$C_2H_3O_2Cl$ Chloroacetic acid, catalytic activity of, in presence of its salts (DAWSON and REIMAN), 1426.

$C_2H_3O_2Br$ Bromoacetic acid, alkali salts, reaction of, with alkalis in methylalcoholic solution (SENTER and WOOD), 1070.

C_2H_5OCl Chloromethyl ether, syntheses by means of (SIMONSEN), 783; condensation of, with α-alkylacetoacetic esters (LAPWORTH and MELLOR), 1273

C_3 Group.

C_3H_6O Acetone, equilibrium of caoutchouc, benzene and (Caspari), 162; nitration and chlorination of (Rakshit), 1115; condensation of glycerol and (Irvine, Macdonald, and Soutar), 337.

Allyl alcohol, preparation of (Chattaway), 407.

$C_3H_8O_3$ Glycerol, condensation of, with acetone and benzaldehyde (Irvine, Macdonald, and Soutar), 237.

3 III

$C_3H_3O_2N$ Cyanoacetic acid, keto-enol transformation of, and its derivatives (Dawson, Sugden, and Taylor), 1030.

$C_3H_4ON_2$ Cyanoacetamide, action of, with hydroxymethylene ketones (Sen-Gupta), 1347.

$C_3H_5O_2Br$ Bromopropionic acid, alkali salts, interaction of, with alkalis in methyl-alcoholic solution (Senter and Wood), 1070.

3 V

$C_3H_2N_3Cl_4SAu$ Thiazole-2-diazonium aurichloride (Morgan and Morrow), 1295.

C_4 Group.

$C_4H_4O_3$ α-Tetronic acid, synthesis of (Kletz and Lapworth), 1254.

$C_4H_4O_4$ Diketodioxan, and its salts (Ghosh), 1593.

$C_4H_6O_4$ Succinic acid, rotation of derivatives of (Clough), 96.

$C_4H_6O_5$ Malic acid, rotation of derivatives of (Clough), 99.

$C_4H_6O_6$ Racemic acid, partial resolution of, by means of *l*-maleic acid (McKenzie), 440.

Tartaric acid, rotation of derivatives of (Clough), 96.

$C_4H_8O_3$ Methyleneglycerol, structure of, and its brucine salt (Peacock), 815.

$C_4H_{10}O_3$ Glycerol α-methyl ether, preparation and reactions of (Irvine, Macdonald, and Soutar), 345.

4 III

$C_4H_5O_3N$ *anti*- and *syn*-α-Oximinobutyrolactones (Kletz and Lapworth), 1259.

$C_4H_6O_2N_2$ *l*-Methylhydantoin (Dakin), 439.

$C_4H_6O_3N_4$ Allantoin, constitution of (Dakin), 434.

$C_4H_8O_3N_2$ *l*-α-Carbamidopropionic acid (Dakin), 438.

$C_4H_{10}OBr_2$ βγ-Dibromo-α-methoxypropane (Irvine, Macdonald, and Soutar), 349.

$C_4H_{10}ClP$ Chlorodiethylphosphine (Collie and Reynolds), 368.

4 IV

$C_4H_{16}N_4Cl_3Co$ *trans*-Dichlorodiethylenediaminecobaltic chloride, additive compounds of (Price and Brazier), 1713.

C_5 Group.

$C_5H_4O_2$ α- and γ-Pyrones, compounds of iodine with (Barger and Starling), 411.

$C_5H_4N_4$ 1:2:3:9-Benzo*iso*tetrazole (Fargher and Furness), 695.

$C_5H_7N_3$ 2-Pyridylhydrazine, and its salts (Fargher and Furness), 691.

$C_5H_8O_2$ Acetylacetone, condensation of ethyl cyanoacetate and (Simonsen and Nayak), 792.

$C_5H_8O_6$ α-Hydroxy-β-methoxysuccinic acid (HAWORTH), 15.
Methyl tartrate, rotatory dispersion in (LOWRY and ABRAM), 1187.
$C_5H_{12}O$ *dl-sec.*-Butylcarbinol, preparation and resolution of, and its salts (COHEN, MARSHALL, and WOODMAN), 892.

5 III

$C_5H_7O_2N$ Ethyl cyanoacetate, condensation of, with acid chlorides (BRADSHAW, STEPHEN, and WEIZMANN), 803; condensation of acetylacetone and (SIMONSEN and NAYAK), 792.

C_6 Group.

C_6H_6 Benzene, absorption spectra of halogen and nitrile derivatives of (PURVIS), 496; equilibrium of, with caoutchouc and acetone, and with caoutchouc and alcohol (CASPARI), 162.

6 II

$C_6H_5N_3$ 1:2:9-Benzo*iso*triazole, and its salts (FARGHER and FURNESS), 695.
$C_6H_6O_3$ Pyrogallol, oxidation of (NIERENSTEIN), 1217.
$C_6H_6Cl_6$ Hexachloro*cyclo*hexane, absorption spectra of (PURVIS), 506.
$C_6H_{10}O_3$ Ethyl acetoacetate, condensation of, with acid chlorides (BRADSHAW, STEPHEN, and WEIZMANN), 803.
$C_6H_{10}O_5$ γ-Methoxypropane-αβ-dicarboxylic acid, and its silver salt (SIMONSEN), 787.
$C_6H_{12}O_2$ γ-Methoxymethoxy-Δβ-butylene (LAPWORTH and MELLOR), 1277.
$C_6H_{12}O_6$ Dextrose (*glucose*), new form of (IRVINE, FYFE, and HOGG), 524.
Dextrose and Laevulose, action of alkalis on (POWELL), 1335.
α- and β-Glucoses, mutarotation of (IRVINE and STEELE), 1230.
$C_6H_{14}O_6$ Mannitol, conductivity and rotation of, and of its methylated derivatives (IRVINE and STEELE), 1221.

6 III

$C_6H_3O_3N_3$ Nitrobenzenediazo-oxides (MORGAN and PORTER), 651.
C_6H_4NCl 2-Chloropyridine, preparation of (FARGHER and FURNESS), 690.
$C_6H_5O_3N$ Nitrophenols, solubility of (SIDGWICK, SPURRELL, and DAVIES), 1202.
$C_6H_6N_2Cl_2$ 2:4-Dichlorophenylhydrazine, and its salts (CHATTAWAY and PEARCE), 32.
$C_6H_8ON_4$ 2-Pyridylsemicarbazide (FARGHER and FURNESS), 694.
$C_6H_{15}OP$ Triethylphosphine oxide, removal of oxygen from (COLLIE and REYNOLDS), 367.

6 IV

$C_6H_{10}O_3NBr$ Ethyl *syn*-oximino-γ-bromobutyrate (KLETZ and LAPWORTH), 1258.

6 V

$C_6H_4O_2NCl_3S$ *p*-Chlorobenzenesulphondichloroamide, and its salts (BAXTER and CHATTAWAY), 1816.
$C_6H_4O_2NBr_3S$ *p*-Bromobenzenesulphondibromoamide, and its salts (BAXTER and CHATTAWAY), 1817.

6 VI

$C_6H_4O_2NCl_2BrS$ *p*-Bromobenzenesulphondichloroamide, and its salts (BAXTER and CHATTAWAY), 1816.
$C_6H_4O_2NCl_2IS$ *p*-Iodobenzenesulphondichloroamide, and its salts (BAXTER and CHATTAWAY), 1817.

C_7 Group.

C_7H_8 Toluene, absorption spectra of halogen and nitrile derivatives of (PURVIS), 496.

7 II

C_7H_6O Benzaldehyde, condensation of glycerol and (IRVINE, MACDONALD, and SOUTAR), 337.

$C_7H_6O_2$ Benzoic acid, absorption spectra of (PURVIS), 967; rotation of esters of (KENYON and PICKARD), 115.

C_7H_8O Anisole, absorption spectrum of (PURVIS), 660.

Cresols, solubility of (SIDGWICK, SPURRELL, and DAVIES), 1203.

$C_7H_9N_3$ Acetaldehyde-2-pyridylhydrazone (FARGHER and FURNESS), 692.

$C_7H_{10}O_2$ Methyldihydroresorcin ($+ H_2O$), preparation of (CROSSLEY and RENOUF), 605.

$C_7H_{10}O_6$ Ethyl ethane-$\alpha\beta\beta$-tricarboxylate, sodium derivative, action of chloromethyl ether on (SIMONSEN), 783.

$C_7H_{10}O_7$ γ-Methoxypropane-$\alpha\beta\beta$-tricarboxylic acid, and its silver salt (SIMONSEN), 786.

$C_7H_{12}O_4$ Ethyl malonate, condensation of, with acid chlorides (BRADSHAW, STEPHEN, and WEIZMANN), 803.

Methoxy-β-methoxy-α-methylcrotonic acid (LAPWORTH and MELLOR), 1276.

$C_7H_{14}O_2$ 1-Methyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 606.

$C_7H_{14}O_3$ *iso*Propylideneglycerol methyl ether (IRVINE, MACDONALD, and SOUTAR), 344.

$C_7H_{15}N$ 5-*gem*-Dimethylpiperidine, and its salts (DUNLOP), 1712.

7 III

$C_7H_4O_6N_2$ Pyrazine-2:5:6-tricarboxylic acid, and its copper salt (BRADSHAW, STEPHEN, and WEIZMANN), 813.

$C_7H_5O_2Cl$ *o*-, *m*-, and *p*-Chlorobenzoic acids, absorption spectra of (PURVIS), 969.

$C_7H_5O_2Br$ *o*-, *m*-, and *p*-Bromobenzoic acids, absorption spectra of (PURVIS), 969.

$C_7H_5O_2I$ *o*-, *m*-, and *p*-Iodobenzoic acids, absorption spectra of (PURVIS), 969.

$C_7H_5O_4N$ *o*-, *m*-, and *p*-Nitrobenzoic acids, absorption spectra of (PURVIS), 970.

$C_7H_6O_5N_4$ 2:6-Dinitrophenyl-1-methylnitrosoamine (MELDOLA and HOLLELY), 619.

C_7H_6ClBr 3-Chloro-5-bromotoluene, preparation and nitration of (COHEN and MURRAY), 847.

C_7H_7OBr *p*-Bromoanisole, absorption spectrum of (PURVIS), 660.

$C_7H_7O_3N$ 4- and 5-Nitroguaiacols (CARDWELL and ROBINSON), 255.

$C_7H_8O_4N_4$ 3:5-Dinitromethyl-*p*-phenylenediamine (MELDOLA and HOLLELY), 617.

C_7H_9ON *o*- and *p*-Anisidines, absorption spectra of (PURVIS), 663.

ψ-Lutidocarbostyril, salts of (SIMONSEN and NAYAK), 795.

$C_7H_9ON_3$ Acetyl-2-pyridylhydrazine (FARGHER and FURNESS), 694.

7 IV

C_7H_8ONCl 3-Chloro-*p*-anisidine (HURST and THORPE), 939.

7 V

$C_7H_7O_2NCl_2S$ *p*-Chlorobenzenesulphonmethylchloroamide (BAXTER and CHATTAWAY), 1818.

$C_7H_8O_2NClS$ *p*-Chlorobenzenesulphonmethylamide (BAXTER and CHATTAWAY), 1818.

7 VI

$C_7H_7O_2NClBrS$ *p*-Chlorobenzenesulphonmethylbromoamide (BAXTER and CHATTAWAY), 1818.

C_8 Group.

$C_8H_4O_4$ Diketodihydrobenzdioxin, and its salts (GHOSH), 1594.

$C_8H_6O_3$ Ketodihydrobenzdioxin, and its salts (GHOSH), 1596.

$C_8H_8O_2$ Phenylacetic acid, absorption spectra of (PURVIS), 967.

o-, *m*-, and *p*-Toluic acids, absorption spectra of (PURVIS), 969; solubility of (SIDGWICK, SPURRELL, and DAVIES), 1203.

$C_8H_8O_3$ Homopiperonyl alcohol, reaction of (ROBINSON), 267.

Mandelic acid, absorption spectra of (PURVIS), 968.

$C_8H_8O_4$ 2-Hydroxy-6-methoxybenzoic acid (CLEWER, GREEN, and TUTIN), 838.

$C_8H_{10}O$ Phenetole, absorption spectrum of (PURVIS), 661.

$C_8H_{10}O_4$ $\Delta^{\alpha\epsilon}$-Hexadiene-$\beta\epsilon$-dicarboxylic acid, and its silver salt (SIMONSEN), 790.

$C_8H_{10}O_6$ Dimethoxysuccinic acid, rotation of esters of (T. S. and D. C. PATTERSON), 151.

$C_8H_{11}N_3$ Acetone-2-pyridylhydrazone (FARGHER and FURNESS), 692.

$C_8H_{12}O_2$ Δ^1-*cyclo*Hexeneacetic acid, preparation of (BEESLEY, INGOLD, and THORPE), 1099.

*cyclo*Hexylideneacetic acid, preparation of (BEESLEY, INGOLD, and THORPE), 1099.

$C_8H_{12}O_4$ Δ^{α}-Hexene-$\beta\zeta$-dicarboxylic acid (SIMONSEN), 791.

$C_8H_{14}O_4$ Methyl methoxy-β-methoxy-α-methylcrotonate (LAPWORTH and MELLOR), 1276.

$C_8H_{14}O_6$ Ethyl tartrate, rotatory power, refractivity and molecular solution volume of (PEACOCK), 1547; rotatory dispersion in (LOWRY and DICKSON), 1173.

$C_8H_{16}O_4$ Ethyl β-methoxy-α-ethoxypropionate (IRVINE, MACDONALD, and SOUTAR), 349.

8 III

$C_8H_5O_8N_3$ Trinitrodihydrobenzdioxin (GHOSH), 1592.

$C_8H_6O_2Br_2$ Dibromodihydrobenzdioxin (GHOSH), 1592.

$C_8H_6O_6N_2$ Dinitrodihydrobenzdioxan (GHOSH), 1591.

C_8H_7ON 1-Methylpyridone, preparation of (FARGHER and FURNESS), 690.

$C_8H_7O_2Cl$ Phenylchloroacetic acid, kinetics and dissociation constant of (SENTER), 908; conversion of, into phenylaminoacetic acid (SENTER and DREW), 638.

l-Phenylchloroacetic acid, transformation of, into *d*-diphenylsuccinic acid (MCKENZIE, DREW, and MARTIN), 26.

$C_8H_7O_2Br$ Bromodihydrobenzdioxin (GHOSH), 1592.

Phenylbromoacetic acid, resolution of, and its salts (MCKENZIE and WALKER), 1691.

$C_8H_8O_3N_4$ Nitrobenzaldehydesemicarbazones, and their hydrochlorides (HENDERSON and HEILBRON), 1750.

$C_8H_8O_5N_2$ 5-Nitrovanillinoxime, and its salts (BRADY and DUNN), 1861.

C_8H_9OBr *p*-Bromophenetole, absorption spectrum of (PURVIS), 661.

C_8H_9OF *p*-Fluorophenetole, absorption spectrum of (PURVIS), 661.

$C_8H_9O_2N$ Phenylaminoacetic acid, conversion of phenylchloroacetic acid into (SENTER and DREW), 638.

$C_8H_9O_2N_3$ *p*-Hydroxybenzaldehydesemicarbazone, and its salts (HENDERSON and HEILBRON), 1747.

Pyruvic acid 2-pyridylhydrazone ($+1\frac{1}{2}H_2O$) (FARGHER and FURNESS), 693.

Salicylaldehydesemicarbazone, and its salts (HENDERSON and HEILBRON), 1746.

$C_8H_9O_3N$ 5- and 6-Nitro-2-methoxytoluenes (SIMONSEN and NAYAK), 832.
$C_8H_9O_4N$ 6-Nitro-4-hydroxy-*m*-tolyl methyl ether (CARDWELL and ROBINSON), 258.
$C_8H_{10}O_3N_2$ 4-, 5-, and 6-Nitro-3-amino-2-methoxytoluenes (SIMONSEN and NAYAK), 831.
$C_8H_{11}ON$ *o*- and *p*-Phenetidines, absorption spectra of (PURVIS), 664.
$C_8H_{11}O_2N$ 2-Aminoresorcinol dimethyl ether, and its salts (TURNER), 473.
$C_8H_{11}NS$ *p*-Thiol-β-phenylethylamine, and its salts (KING), 230.

8 IV

$C_8H_6O_2NBr$ 5-Bromo-4-hydroxy-3-methoxybenzonitrile (BRADY and DUNN), 1860.
$C_8H_6O_4NCl$ 6-Nitrohomopiperonyl chloride (G. M. and R. ROBINSON), 1758.
$C_8H_6ON_2Cl_2$ Acetyl-2:4-dichlorophenylhydrazine (CHATTAWAY and PEARCE), 33.
$C_8H_8ON_3Cl$ Chlorobenzaldehydesemicarbazones, and their hydrochlorides (HENDERSON and HEILBRON), 1749.
$C_8H_8O_2NCl$ 3-Chloro-4-acetylaminophenol (HURST and THORPE), 939.
$C_8H_8O_3NBr$ 5-Bromo-4:6-dimethyl-2-pyridone-3-carboxylic acid (SIMONSEN and NAYAK), 796.
5-Bromovanillinoxime, and its hydrochloride (BRADY and DUNN), 1859.
$C_8H_9O_2N_3S$ Thiazole-2-azoacetylacetone (MORGAN and MORROW), 1296.
$C_8H_{10}ONCl$ 3-Chloro-*p*-phenetidine, and its hydrochloride (HURST and THORPE), 938.

C_9 Group.

$C_9H_6O_2$ Coumarin, salts of (GHOSH), 1599.
Diketohydrindene, condensation of aromatic hydroxyaldehydes with (SASTRY and GHOSH), 1442.
Phenylpropiolic acid, absorption spectra of (PURVIS), 972.
$C_9H_8O_2$ Cinnamic acid, absorption spectra of (PURVIS), 970.
$C_9H_{10}O_2$ Ethyl benzoate, saponification of derivatives of (MCCOMBIE and SCARBOROUGH), 156.
$C_9H_{12}O$ β-Phenylpropyl alcohol, preparation and resolution of (COHEN, MARSHALL, and WOODMAN), 895.
$C_9H_{12}O_3$ Homoveratryl alcohol, reaction of (ROBINSON), 267.
$C_9H_{16}O$ 1-*iso*Propyl*cyclo*hexan-3-one (CROSSLEY and PRATT), 175.
$C_9H_{16}O_4$ Ethyl γ-ethoxy-α-methylacetoacetate, preparation of (BRADSHAW, STEPHEN, and WEIZMANN), 810.
$C_9H_{16}O_6$ Glucoseacetone (IRVINE and MACDONALD), 1701.
$C_9H_{18}O$ 1-*iso*Propyl*cyclo*hexan-3-ol (CROSSLEY and PRATT), 174.
$C_9H_{18}O_2$ 1-*iso*Propyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 608.
1:1:2-Trimethyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 607.
$C_9H_{18}O_6$ Trimethylglucosone (IRVINE and MACDONALD), 1710.

9 III

C_9H_6OS 2-Thio-1:2-benzpyran, and its salts (GHOSH), 1599.
$C_9H_7O_4N$ *o*-, *m*-, and *p*-Nitrocinnamic acids, absorption spectra of (PURVIS), 971.
$C_9H_8O_2N_2$ Substance, from ethoxymethyleneacetylacetone and cyanoacetamide (SEN-GUPTA), 1364.
C_9H_9OCl Benzyl chloromethyl ketone (CLIBBENS and NIERENSTEIN), 1492.

$C_9H_9ON_3$ 1-(2′-Pyridyl)-3-methyl-5-pyrazolone (Farghер and Furness), 695.

$C_9H_9O_3N_3$ Piperonalsemicarbazone, dihydrochloride of (Henderson and Heilbron), 1748.

$C_9H_9O_4N$ Acid, from substance $C_9H_8O_2N_2$ (Sen-Gupta), 1364.

$C_9H_9O_5N_5$ 3:5-Dinitro-1-acetylaminophenyl-4-methylnitrosoamine (Meldola and Hollely), 615.

$C_9H_9O_7N_5$ 3:5-Dinitro-1-acetylaminophenyl-4-methylnitroamine (Meldola and Hollely), 616.

$C_9H_{10}ON_2$ 3-Cyano-5-methyl-6-ethyl-2:3-dihydro-2-pyridone (Sen-Gupta), 1362.

$C_9H_{10}NCl$ 2-Chlorotetrahydroquinoline (Sen-Gupta), 1358.

$C_9H_{10}O_5N_4$ 3:5-Dinitroacetylmethyl-*p*-phenylenediamine (Meldola and Hollely), 615.

$C_9H_{11}ON$ 2:3:5:6:7:8-Hexahydro-2-quinolone (Sen-Gupta), 1357.

$C_9H_{11}ON_3$ *p*-Tolylaldehydesemicarbazone, and its hydrochloride (Henderson and Heilbron), 1746.

$C_9H_{11}O_2N_3$ *o*- and *p*-Methoxybenzaldehydesemicarbazones, and their salts (Henderson and Heilbron), 1746.

$C_9H_{11}O_3N$ 3-Cyano-5-methyl-6-ethyl-2:3-dihydro-2-pyridonecarboxylic acid (Sen-Gupta), 1363.

1:4:6-Trimethyl-2-pyridone-3-carboxylic acid, and its salts (Simonsen and Nayak), 797.

$C_9H_{11}O_3N_3$ 2-Hydroxy-*m*-methoxybenzaldehydesemicarbazone, and its dihydrochloride (Henderson and Heilbron), 1749.

Vanillinsemicarbazone, hydrochloride of (Henderson and Heilbron), 1748.

$C_9H_{11}O_6N_5$ 2:3:5-Trinitro-4-trimethylammonium-1-benzoquinoneimide (Meldola and Hollely), 621.

$C_9H_{13}OCl$ 5-Chloro-1-*iso*propyl-Δ^4-*cyclo*hexen-3-one (Crossley and Pratt), 173.

$C_9H_{15}ON_3$ *cyclo*Hexane-*spiro-cyclo*pentanone (Beesley, Ingold, and Thorpe), 1104.

$C_9H_{17}ON$ *n*-Propyldiacetonamine (Evens, Gifford, and Griffiths), 1674.

Oxime of 1-*iso*propyl*cyclo*hexan-3-one (Crossley and Pratt), 176.

9 IV

$C_9H_{10}ON_2Cl_2$ Propionyl-2:4-dichlorophenylhydrazine (Chattaway and Pearce), 34.

$C_9H_{10}O_2NCl$ Acetyl derivative of 3-chloro-*p*-anisidine (Hurst and Thorpe), 939.

C_{10} Group.

$C_{10}H_8O_2$ 4-Methylcoumarin, and its salts (Ghosh), 1600.

$C_{10}H_8O_3$ 7-Hydroxy-4-methylcoumarin, and its salts (Ghosh), 1603.

α-Hydroxy-β-phenylcrotonolactone, and its salts (Hall, Hynes, and Lapworth), 132.

$C_{10}H_{10}O_3$ α-Hydroxy-β-phenylbutyrolactone, and its sodium salt (Hall, Hynes, and Lapworth), 141.

$C_{10}H_{12}O_2$ Ethyl *o*-hydroxyphenoxyacetate (Ghosh), 1595.

$C_{10}H_{12}O_3$ Anhydride of *cis-cyclo*hexane-*spiro-cyclo*propane-1:2-dicarboxylic acid (Beesley, Ingold, and Thorpe), 1097.

$C_{10}H_{12}O_4$ Methyl 2:6-dimethoxybenzoate (Clewer, Green, and Tutin), 838.

$C_{10}H_{12}N$ Base, and its picrate, from yohimbine (Barger and Field), 1029.

$C_{10}H_{14}O$ γ-Phenylbutyl alcohol, preparation and resolution of (COHEN, MARSHALL, and WOODMAN), 901.

$C_{10}H_{14}O_3$ Camphoric anhydride, rate of hydration of (WILSDON and SIDGWICK), 679.

$C_{10}H_{14}O_4$ *cis*- and *trans-cyclo*Hexane-*spiro-cyclo*propane-1:2-dicarboxylic acids (BEESLEY, INGOLD, and THORPE), 1096.

Lactone of α-hydroxy*cyclo*hexane-1:1-diacetic acid, and its silver salt (BEESLEY, INGOLD, and THORPE), 1095.

$C_{10}H_{14}O_5$ *cyclo*Hexane-*spiro-cyclo*propanol-2:3-dicarboxylic acid, and its salts (BEESLEY, INGOLD, and THORPE), 1103.

Lactonic acids of αα′-dihydroxy*cyclo*hexane-1:1-diacetic acid, and their salts (BEESLEY, INGOLD, and THORPE), 1100.

Lactonic acid of α-hydroxy-α′-*cyclo*hexan-1-olsuccinic acid, and its salts (BEESLEY, INGOLD, and THORPE), 1105.

$C_{10}H_{14}O_8$ Ethyl butane-ααδδ-tetracarboxylate, sodium derivative, action of chloromethyl ether on (SIMONSEN), 783.

$C_{10}H_{16}O$ Camphor, rotatory power, refractivity and molecular solution volume of (PEACOCK), 1547.

βη-Dimethyl-Δγζ-octadien-ε-one (EVENS, GIFFORD, and GRIFFITHS), 1677.

α-Hydroxy*cyclo*hexane-1:1-diacetic acid, salts of (BEESLEY, INGOLD, and THORPE), 1095.

$C_{10}H_{18}O$ Borneols, rotation of (KENYON and PICKARD), 35.

Menthones, rotation of (KENYON and PICKARD), 35.

$C_{10}H_{18}O_6$ Tetramethylgluconolactone (IRVINE, FYFE, and HOGG), 539.

$C_{10}H_{20}O$ εε-Dimethyloctan-δ-one (PARRY), 111.

$C_{10}H_{20}O_6$ Tetramethyl γ-glucose (IRVINE, FYFE, and HOGG), 537.

$C_{10}H_{22}O_6$ Tetramethyl sorbitol (IRVINE, FYFE, and HOGG), 539.

10 III

$C_{10}H_5O_4Cl$ 6-Chlorocoumarin-4-carboxylic acid (DEY), 1644.

$C_{10}H_7O_4Cl$ 3-Chlorodihydroxy-4-methylcoumarins (DEY), 1648.

$C_{10}H_8O_6N_2$ Acetylnitropiperonaloxime (BRADY and DUNN), 1862.

$C_{10}H_9O_4Cl$ 2-Acetoxy-4-methoxybenzoyl chloride (CLIBBENS and NIERENSTEIN), 1494.

$C_{10}H_{10}ON_2$ 3-Cyanohexahydro-2-quinolone (SEN-GUPTA), 1356.

$C_{10}H_{10}O_2N_2$ α-Ketobutyrolactonephenylhydrazone (KLETZ and LAPWORTH), 1262.

Methyl ether from substance $C_9H_8O_2N_2$ (SEN-GUPTA), 1364.

$C_{10}H_{10}O_6N_2$ Acetylnitrovanillinoxime (+ H_2O) (BRADY and DUNN), 1861.

$C_{10}H_{11}OCl$ β-Phenylethyl chloromethyl ketone (CLIBBENS and NIERENSTEIN), 1493.

$C_{10}H_{11}O_3N$ Hexahydro-2-quinolone-3-carboxylic acid (SEN-GUPTA), 1357.

$C_{10}H_{11}O_3N_3$ *o*-Acetoxybenzaldehydesemicarbazone, and its dihydrochloride (HENDERSON and HEILBRON), 1750.

$C_{10}H_{11}O_5N$ Acetyl derivative of 6-nitro-4-hydroxy-*m*-tolyl methyl ether (CARDWELL and ROBINSON), 258.

$C_{10}H_{11}O_7N$ 6-Nitro-3:4-dimethoxymandelic acid (G. M. and R. ROBINSON), 1755.

$C_{10}H_{12}O_2N_2$ 3-Cyano-9-hydroxyoctahydro-2-quinolone (SEN-GUPTA), 1354.

$C_{10}H_{12}O_4N_2$ 5- and 6-Nitro-3-acetylamino-2-methoxytoluenes (SIMONSEN and NAYAK), 833.

$C_{10}H_{13}ON$ 6-, 7-, and 8-Methylhexahydro-2-quinolones (SEN-GUPTA), 1360.

Substance from substance $C_{11}H_{12}ON_2$ (SEN-GUPTA), 1367.

$C_{10}H_{13}O_2N_3$ Ethyl pyruvate 2-pyridylhydrazone (Farmer and Furness) 693.

$C_{10}H_{13}O_3N_3$ 2:3-Dimethoxybenzaldehydesemicarbazone, and its dihydrochloride (Henderson and Heilbron), 1749.

Veratraldehydesemicarbazone, dihydrochloride of (Henderson and Heilbron), 1748.

$C_{10}H_{14}ON_2$ Acetyldimethyl-*p*-phenylenediamine, preparation of, and its salts (Meldola and Hollely), 617.

$C_{10}H_{14}ON_4$ *p*-Dimethylaminobenzaldehydesemicarbazone, hydrochloride of (Henderson and Heilbron), 1751.

$C_{10}H_{15}OCl$ α′-Chlorocamphor, preparation and properties of (Lowry and Steele), 1382.

$C_{10}H_{15}OBr$ Bromocamphor, rotatory power, refractivity and molecular solution volume of (Peacock), 1547.

$C_{10}H_{15}O_2N$ 2-Aminoresorcinol diethyl ether, and its salts (Turner), 471.

$C_{10}H_{15}O_3N$ Nitrocamphor, and its ammonium salt (Lowry and Steele), 1039.

$C_{10}H_{16}OBr_4$ βη-Dimethyl-Δγζ-octadien-ε-one tetrabromide (Evens, Gifford, and Griffiths), 1677.

$C_{10}H_{19}ON$ *n*-Butyldiacetonamine (Evens, Gifford, and Griffiths), 1674.

$C_{10}H_{19}ON_3$ Semicarbazone of 1-*iso*propyl*cyclo*hexan-3-one (Crossley and Pratt), 176.

10 IV

$C_{10}H_8O_3NBr$ 5-Bromo-4-acetoxy-3-methoxybenzonitrile (Brady and Dunn), 1860.

$C_{10}H_{12}O_2NCl$ 3-Chloroaceto-*p*-phenetidide (Hurst and Thorpe), 939.

$C_{10}H_{12}O_2NBr$ Ethyl 5-bromo-4:6-dimethyl-2-pyridone-3-carboxylate (Simonsen and Nayak), 796.

$C_{10}H_{13}O_4NS$ *dl*-*p*-Toluenesulphonylalanine, resolution of (Gibson and Simonsen), 798.

$C_{10}H_{15}O_4BrS$ α-Bromo-*d*-camphor-β-sulphonic acid, ammonium salts, isomeric, absorption spectra of (Purvis), 643.

$C_{10}H_{16}ON_3Cl$ Semicarbazone of 5-chloro-1-*iso*propyl-Δ⁴-*cyclo*hexen-3-one (Crossley and Pratt), 174.

$C_{10}H_{25}O_5ClSi_2$ Chloropentaethoxysilicoethane, action of alkalis and water on (Martin), 1043.

10 V

$C_{10}H_{18}O_8N_2S_2Co$ Cobalt ethylenediamine thiodiacetate (+ $2H_2O$) (Price and Brazier), 1372.

C_{11} Group.

$C_{11}H_6O_5$ 5:7-Dihydroxycoumarin-4-acetic anhydride (Dey), 1642.

$C_{11}H_8O_2$ 1- and 2-Naphthoic acids, rotation of esters of (Kenyon and Pickard), 115.

$C_{11}H_8O_3$ 3-Acetylcoumarin, and its salts (Ghosh), 1603.

$C_{11}H_8O_4$ 6- and 7-Methylcoumarin-4-carboxylic acids (Dey), 1644.

$C_{11}H_8O_5$ 8-Hydroxycoumarin-4-acetic acid (Dey), 1635.

5-Methylcoumarone-1:2-dicarboxylic acid, and its silver salt (Dey), 1650.

$C_{11}H_8O_6$ 5:7-, 6:7-, and 7:8-Dihydroxycoumarin-4-acetic acids (Dey), 1640.

$C_{11}H_9N$ Base, and its picrate from yohimbine (Barger and Field), 1029.

$C_{11}H_{10}O_3$ Dimethylcoumarins, and their salts (Ghosh), 1600; (Dey), 1637.

7-Hydroxy-2-methyl-4-methylenebenz-γ-pyran, and its salts (Ghosh), 1598.

$C_{11}H_{10}O_3$ Methyl derivative of α-hydroxy-β-phenylcrotonolactone (HALL, HYNES, and LAPWORTH), 139.

$C_{11}H_{10}O_6$ β-2:4-*m*-Dihydroxyphenylglutaconic acid, and its disilver salt (DEY), 1632.

$C_{11}H_{11}N_3$ Acetaldehyde-2-quinolylhydrazone (FARGHER and FURNESS), 696.

$C_{11}H_{14}O_3$ Benzylideneglycerol methyl ether (IRVINE, MACDONALD, and SOUTAR), 345.

$C_{11}H_{14}O_5$ Substance, from methyl acetoacetate and methyl methoxy-β-methoxy-α-methylcrotonate (LAPWORTH and MELLOR), 1280.

$C_{11}H_{16}O_8$ Ethyl pentane-*aaee*-tetracarboxylate, sodium derivative, action of chloromethyl ether on (SIMONSEN), 783.

$C_{11}H_{20}O_4$ Ethyl γ-ethoxy-α-*n*- and -*iso*-propylacetoacetates (BRADSHAW, STEPHEN, and WEIZMANN), 810.

$C_{11}H_{22}O_6$ Tetramethyl γ-methylglucoside (IRVINE, FYFE, and HOGG), 535.

11 III

$C_{11}H_5O_5Cl_3$ 3:6:8-Trichloro-7-hydroxycoumarin-4-acetic acid (DEY), 1633.

$C_{11}H_7O_4Cl$ 6-Chloro-7-methylcoumarin-4-carboxylic acid (DEY), 1645.

$C_{11}H_7O_5N$ 4-Nitro-1-naphthol-2-carboxylic acid (DEY), 1626.

$C_{11}H_9O_4N_3$ α-Oximino-γ-phthaliminoacetone (BRADSHAW, STEPHEN, and WEIZMANN), 808.

$C_{11}H_9O_2Cl$ 3-Chloro-4:6- and 4:7-dimethylcoumarins (DEY), 1646.

$C_{11}H_{10}OS$ 2-Thio-6:7-dimethyl-1:2-benzpyran (GHOSH), 1601.

$C_{11}H_{11}ON_3$ Acetyl-2-quinolylhydrazine (FARGHER and FURNESS), 698.

$C_{11}H_{11}O_3N$ Oxime of 6:7-dimethylcoumarin (GHOSH), 1601.

$C_{11}H_{11}O_6N$ Methyleneglycerol *o*-nitrobenzoate (PEACOCK), 816.

$C_{11}H_{11}O_7N_3$ ω:3:5-Trinitro-2-hydroxy-α:4:6-trimethylstyrene (JORDAN and THORPE), 406.

$C_{11}H_{12}ON_2$ 3-Cyano-6-, -7-, and -8-methylhexahydro-2-quinolones (SEN-GUPTA), 1361.

2-Ethoxymethylquinoxaline and its salts (BRADSHAW, STEPHEN, and WEIZMANN), 812.

Substance from acetyl*cyclo*hexanone and cyanoacetamide (SEN-GUPTA), 1367.

$C_{11}H_{12}O_2N_2$ Ethyl ether from substance $C_9H_8O_2N_2$ (SEN-GUPTA), 1364.

$C_{11}H_{13}O_3N$ 6-, 7-, and 8-Methylhexahydro-2-quinolone-3-carboxylic acids (SEN-GUPTA), 1361.

$C_{11}H_{13}O_4N$ Phenylurethane of methyleneglycerol (PEACOCK), 816.

$C_{11}H_{13}O_6N$ Nitro-3:4-diethoxybenzoic acid (PERKIN and WATSON), 206.

$C_{11}H_{14}O_2N_2$ 3-Cyano-9-hydroxy-7-methyloctahydro-2-quinolone (SEN-GUPTA), 1359.

3-Cyano-9-methoxyoctahydro-2-quinolone (SEN-GUPTA), 1356.

$C_{11}H_{15}ON_3$ Semicarbazone of 3-benzyl-2-methyl-1:4-α-naphthapyrone (JACOBSON and GHOSH), 432.

$C_{11}H_{13}O_2N_3$ Hydrazide of ethyl α-cyano-β-2-keto-4-methyl*cyclo*hexylideneropionate (SEN-GUPTA), 1361.

$C_{11}H_{16}ON_2$ Acetylmethylethyl-*p*-phenylenediamine (MELDOLA and HOLLELY), 613.

$C_{11}H_{23}ON_3$ εε-Dimethyloctan-δ-one semicarbazone (PARRY), 111.

11 V

$C_{11}H_{11}O_2NClBr$ Diacetyl derivative of 3-chloro-5-bromotoluidine (COHEN and MURRAY), 850.

C_{12} Group.

$C_{12}H_{18}$ Hexamethylbenzene, absorption spectra of (PURVIS), 507.

12 II

$C_{12}H_7Cl$ 1-Chloroacenaphthylene (CAMPBELL), 920.

$C_{12}H_8O_4$ Anhydride of β-2:6-dihydroxy-*p*-tolylglutaconic acid (DEY), 1638.

$C_{12}H_8Cl_2$ 1:2-Dichloroacenaphthene (CAMPBELL), 919.

$C_{12}H_{10}O_4$ 6- and 8-Methylcoumarin-4-acetic acids (DEY), 1636.

Acetyl derivative of α-hydroxy-β-phenylcrotonolactone (HALL, HYNES, and LAPWORTH), 138.

$C_{12}H_{10}O_5$ 1-Carboxy-4-methylcoumarone-2-acetic acid, and its silver salt (DEY), 1636.

4:5-Dimethylcoumarone-1:2-dicarboxylic acid, and its silver salt (DEY), 1650.

5-Hydroxy-7-methylcoumarin-4-acetic acid (DEY), 1637.

$C_{12}H_{11}N_3$ Benzaldehyde-2-pyridylhydrazone (FARGHER and FURNESS), 692.

$C_{12}H_{12}O_2$ 7(or 5)-Hydroxy-2:5(or 2:7)-dimethyl-4-methylene-γ-benzopyranols, and their salts (COLLIE and REYNOLDS), 370.

4:5:7-Trimethylcoumarin (JORDAN and THORPE), 402.

4:6:7-Trimethylcoumarin, and its salts (GHOSH), 1602.

$C_{12}H_{12}O_3$ 2:3:5-Trimethylcoumarilic acid, and its silver salt (JORDAN and THORPE), 404.

2:4:5-Trimethylcoumarilic acid, and its silver salt (DEY), 1647.

$C_{12}H_{12}O_6$ β-2:6-Dihydroxy-*p*-tolylglutaconic acid, silver salt (DEY), 1637.

$C_{12}H_{14}O_2$ Dihydro-derivatives of hydroxydimethyl-4-methylene-γ-benzopyranols (COLLIE and WHITE), 375.

$C_{12}H_{14}O_3$ Cinnamylideneglycerol, structure of (PEACOCK), 815.

β:4:6-Trimethylcoumarinic acid (JORDAN and THORPE), 402.

$C_{12}H_{16}O_2$ γ-Methoxymethoxy-δ-phenyl-Δβ-butene (LAPWORTH and MELLOR), 1279.

1-Phenyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 610.

Tetrahydro-derivatives of hydroxydimethyl-4-methylene-γ-benzopyranols (COLLIE and WHITE), 375.

$C_{12}H_{16}O_5$ Substance, from ethyl acetoacetate and methyl methoxy-β-methoxy-α-methylcrotonate (LAPWORTH and MELLOR), 1280.

$C_{12}H_{16}O_6$ Acetyl derivative of *cis*-lactonic acid of αα′-dihydroxy*cyclo*hexane-1:1-diacetic acid (BEESLEY, INGOLD, and THORPE), 1103.

$C_{12}H_{18}O_4$ Lactone of ethyl α-hydroxy*cyclo*hexane-1:1-diacetate (BEESLEY, INGOLD, and THORPE), 1098.

$C_{12}H_{18}O_8$ *iso*Butyl diacetyl-*d*-tartrate, rotation of (PATTERSON and MCARTHUR), 814.

$C_{12}H_{20}O_3$ 1-Ethoxy-4-methyl-2-ethoxymethyl*cyclo*hexen-6-one (BRADSHAW, STEPHEN, and WEIZMANN), 809.

$C_{12}H_{22}O_4$ Ethyl γ-ethoxy-α-*iso*butylacetoacetate (BRADSHAW, STEPHEN, and WEIZMANN), 811.

$C_{12}H_{22}O_{11}$ Sucrose, inversion of (LAMBLE and LEWIS), 233; influence of, on the solvent power of water (PHILIP and BRAMLEY), 377.

12 III

$C_{12}H_8O_2S$ Methyl(1)thionaphthacoumarin (SMILES and GHOSH), 1380.

$C_{12}H_8O_4Cl_2$ 3:6-Dichloro-7-methylcoumarin-4-acetic acid (DEY), 1635.

$C_{12}H_9O_4Cl$ 6-Chloro-7-methylcoumarin-4-acetic acid (DEY), 1642.

Ethyl 6-chlorocoumarin-4-carboxylate ($\frac{1}{2}H_2O$) (DEY), 1644.

$C_{12}H_9O_5N_3$ Nitrohydroxybenzeneazoresorcinols (MORGAN and PORTER), 654.

$C_{12}H_9O_7N_3$ 3:6:8-Trinitro-4:5:7-trimethylcoumarin (JORDAN and THORPE), 405.

$C_{12}H_{10}O_8N_2$ 6:8-Dinitro-4:5:7-trimethylcoumarin (JORDAN and THORPE), 405.

$C_{12}H_{10}ClBi$ Diphenylchlorobismuthine (CHALLENGER and ALLPRESS), 19.

$C_{12}H_{11}O_2N_3$ Pyruvic acid 2-quinolylhydrazone (FARGHER and FURNESS), 697.

$C_{12}H_{11}O_2Cl$ 3-Chloro-4:6:7-trimethylcoumarin (DEY), 1647.

$C_{12}H_{11}O_2Br$ 3-Bromo-4:5:7-trimethylcoumarin (JORDAN and THORPE), 402.

$C_{12}H_{11}O_3N_3$ Semicarbazone of 3-acetylcoumarin (GHOSH), 1603.

$C_{12}H_{11}O_4N$ 6-Nitro-4:5:7-trimethylcoumarin (JORDAN and THORPE), 404.

$C_{12}H_{11}O_4Cl$ Dimethyl ether of 3-chloro-5:7-dihydroxy-4-methylcoumarin (DEY), 1648.

$C_{12}H_{12}OS$ 2-Thio-4:6:7-trimethyl-1:2-benzpyran (GHOSH), 1602.

$C_{12}H_{12}O_7N_2$ Diacetylnitrovanillinoxime (BRADY and DUNN), 1861.

3:5-Dinitro-β:4:6-trimethylcoumarinic acid (JORDAN and THORPE), 405.

$C_{12}H_{13}O_2N$ Oxime of 4:6:7-trimethylcoumarin (GHOSH), 1602.

$C_{12}H_{14}O_2N_2$ Ethyl $\alpha\epsilon$-dicyano-$\beta\delta$-dimethyl-$\Delta^{\beta\delta}$-hexadienoate (SIMONSEN and NAYAK), 797.

$C_{12}H_{17}O_4Br$ Lactones of ethyl α-bromo-α'-hydroxy*cyclo*hexane-1:1-diacetate (BEESLEY, INGOLD, and THORPE), 1093.

$C_{12}H_{30}O_6Si_2$ Hexaethoxysilicoethane, action of alkalis and water on (MARTIN), 1043.

12 IV

$C_{12}H_{13}O_5NBr$ Diacetylbromovanillinoxime (BRADY and DUNN), 1860.

$C_{12}H_{13}O_2N_2Br$ Ethyl α-bromo-$\alpha\epsilon$-dicyano-$\beta\delta$-dimethyl-$\Delta^{\beta\delta}$-hexadienoate (SIMONSEN and NAYAK), 798.

12 V

$C_{12}H_7O_2NCl_4S$ *p*-Chlorobenzenesulphon-2:4-dichlorophenylchloroamide (BAXTER and CHATTAWAY), 1819.

$C_{12}H_8O_2NCl_3S$ *p*-Chlorobenzenesulphon-*m*-chlorophenylchloroamide (BAXTER and CHATTAWAY), 1819.

p-Chlorobenzenesulphon-2:4-dichloroanilide (BAXTER and CHATTAWAY), 1819.

$C_{12}H_8O_2NBr_3S$ *p*-Bromobenzenesulphon-2:4-dibromoanilide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_8O_4N_2Cl_2S$ *p*-Chlorobenzenesulphon-*o*-, *m*-, and -*p*-nitrophenylchloroamides (BAXTER and CHATTAWAY), 1821.

$C_{12}H_9O_2NCl_2S$ *p*-Chlorobenzenesulphon-*m*-chloroanilide (BAXTER and CHATTAWAY), 1819.

p-Chlorobenzenesulphonphenylchloroamide (BAXTER and CHATTAWAY), 1819.

$C_{12}H_9O_2NBr_2S$ *p*-Bromobenzenesulphon-*p*-bromoanilide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_9O_2NI_2S$ *p*-Iodobenzenesulphon-*p*-iodoanilide (BAXTER and CHATTAWAY), 1821.

$C_{12}H_9O_4N_2ClS$ *p*-Chlorobenzenesulphon-*o*-, *m*-, and -*p*-nitroanilides (BAXTER and CHATTAWAY), 1821.

$C_{12}H_9O_4N_2BrS$ *p*-Bromobenzenesulphon-nitroanilides (BAXTER and CHATTAWAY), 1822.

$C_{12}H_9O_4N_2IS$ *p*-Iodobenzenesulphon-nitroanilides (BAXTER and CHATTAWAY), 1822.

12 VI

$C_{12}H_7O_2NClBr_3S$ *p*-Bromobenzenesulphon-2:4-dibromophenylchloroamide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_7O_2NCl_2Br_2S$ *p*-Chlorobenzenesulphon-2:4-dibromophenylchloroamide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_7O_2NCl_3BrS$ *p*-Bromobenzenesulphon-2:4-dichlorophenylchloroamide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_8O_2NClBr_2S$ *p*-Bromobenzenesulphon-*p*-bromophenylchloroamide (BAXTER and CHATTAWAY), 1820.

p-Chlorobenzenesulphon-2:4-dibromoanilide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_8O_2NClI_2S$ *p*-Iodobenzenesulphon-*p*-iodophenylchloroamide (BAXTER and CHATTAWAY), 1821.

$C_{12}H_8O_2NCl_2BrS$ *p*-Bromobenzenesulphon-*p*-chlorophenylchloroamide (BAXTER and CHATTAWAY), 1820.

p-Bromobenzenesulphon-2:4-dichloroanilide (BAXTER and CHATTAWAY), 1820.

p-Chlorobenzenesulphon-*p*-bromophenylchloroamide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_8O_2NCl_2IS$ *p*-Chlorobenzenesulphon-*p*-iodophenylchloroamide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_8O_4N_2ClBrS$ *p*-Bromobenzenesulphonnitrophenylchloroamides (BAXTER and CHATTAWAY), 1822.

$C_{12}H_8O_4N_2ClIS$ *p*-Iodobenzenesulphonnitrophenylchloroamides (BAXTER and CHATTAWAY), 1822.

$C_{12}H_9O_2NClBrS$ *p*-Bromobenzenesulphon-*p*-chloroanilide (BAXTER and CHATTAWAY), 1820.

p-Bromobenzenesulphonphenylchloroamide (BAXTER and CHATTAWAY), 1819.

p-Chlorobenzenesulphon-*p*-bromoanilide (BAXTER and CHATTAWAY), 1820.

$C_{12}H_9O_2NClIS$ *p*-Chlorobenzenesulphon-*p*-iodoanilide (BAXTER and CHATTAWAY), 1820.

p-Iodobenzenesulphonphenylchloroamide (BAXTER and CHATTAWAY), 1819.

$C_{12}H_9O_2NBrIS$ *p*-Bromobenzenesulphon-*p*-iodoanilide (BAXTER and CHATTAWAY), 1821.

$C_{12}H_9O_2NBr_2IS$ *p*-Iodobenzenesulphon-*p*-bromoanilide (BAXTER and CHATTAWAY), 1821.

12 VII

$C_{12}H_8O_2NClBrIS$ *p*-Bromobenzenesulphon-*p*-iodophenylchloroamide (BAXTER and CHATTAWAY), 1821.

p-Iodobenzenesulphon-*p*-bromophenylchloroamide (BAXTER and CHATTAWAY), 1821.

C_{13} Group.

$C_{13}H_{12}O_4$ 6:7-Dimethylcoumarin-4-acetic acid (DEY), 1639.

Ethyl 7-methylcoumarin-4-carboxylate (DEY), 1645.

$C_{13}H_{12}O_5$ Ethyl 6-hydroxycoumarin-4-acetate (DEY), 1634.

5-Methoxy-7-methylcoumarin-4-acetic acid (DEY), 638.

Methyl 7-methoxycoumarin-4-acetate (DEY), 1633.

$C_{13}H_{12}O_6$ 7:8-Dimethoxycoumarin-4-acetic acid (DEY), 1641.
Ethyl 6:7- and 7:8-dihydroxycoumarin-4-acetates (DEY), 1640.
$C_{13}H_{13}N_3$ Acetophenone-2-pyridylhydrazone (FARGHER and FURNESS), 692.
$C_{13}H_{14}O_5$ 3-Carboxy-β:4:ε-trimethylcoumarinic acid (JORDAN and THORPE), 401.
$C_{13}H_{16}O_4$ Methoxy-β-methoxy-α-benzylcrotonic acid (LAPWORTH and MELLOR), 1278.
$C_{13}H_{22}O_7$ Ethyl γ-methoxypropane-αββ-tricarboxylate (SIMONSEN), 786.
$C_{13}H_{24}O_7$ Trimethyl oxy-γ-methylglucosideacetone (IRVINE, FYFE, and HOGG), 540.

13 III

$C_{13}H_9O_2N_3$ Phthalyl-2-pyridylhydrazide (FARGHER and FURNESS), 694.
$C_{13}H_{10}NBi$ Diphenylcyanobismuthine (CHALLENGER and ALLPRESS), 20.
$C_{13}H_{10}N_2Cl_2$ Benzaldehyde-2:4-dichlorophenylhydrazone (CHATTAWAY and PEARCE), 34.
$C_{13}H_{11}ON_3$ 1(2′-Quinolyl)-3-methyl-5 pyrazolone (FARGHER and FURNESS), 699.
$C_{13}H_{11}O_2N_3$ Succinyl-2-quinolylhydrazide (FARGHER and FURNESS), 698.
$C_{13}H_{11}O_4Cl$ 3-Chloro-6:7-dimethylcoumarin-4-acetic acid (DEY), 1639.
Ethyl 6-chlorocoumarin-4-acetate (DEY), 1642.
Ethyl 3- and 6-chloro-7-methylcoumarin-4-carboxylates (DEY), 1645, 1649.
$C_{13}H_{11}O_6N$ 8-Nitro-6:7-dimethylcoumarin-4-acetic acid (DEY), 1639.
$C_{13}H_{13}O_4N$ 7-Dimethylaminocoumarin-4-acetic acid (DEY), 1644.
$C_{13}H_{13}N_3S$ Diphenylthiosemicarbazides, preparation of acetyl derivatives of (MCKEE), 1133.
$C_{13}H_{14}O_2N_2$ Substance, from styryl methyl ketone and cyanoacetamide (SEN-GUPTA), 1365.
$C_{13}H_{17}O_3N$ Ethyl α-cyano-β-2-keto-4-methyl*cyclo*hexylidenepropionate (SEN-GUPTA), 1360.
$C_{13}H_{23}O_3N_3$ Semicarbazone of 1-ethoxy-4-methyl-2-ethoxymethyl*cyclo*hexen-6-one (BRADSHAW, STEPHEN, and WEIZMANN), 809.

13 IV

$C_{13}H_{10}O_3N_2Cl_2$ *s*-Di-2-chloro-4-hydroxyphenylcarbamide (HURST and THORPE), 940.

13 V

$C_{13}H_{11}O_2NCl_2S$ *p*-Chlorobenzenesulphonbenzylchloroamide (BAXTER and CHATTAWAY), 1818.
p-Chlorobenzenesulphontolylchloroamides (BAXTER and CHATTAWAY), 1822.
$C_{13}H_{12}O_2NClS$ *p*-Chlorobenzenesulphonbenzylamide (BAXTER and CHATTAWAY), 1818.
p-Chlorobenzenesulphontoluidides (BAXTER and CHATTAWAY), 1822.
$C_{13}H_{12}O_2NBrS$ *p*-Bromobenzenesulphontoluidides (BAXTER and CHATTAWAY), 1823.
$C_{13}H_{12}O_2NIS$ *p*-Iodobenzenesulphontoluidides (BAXTER and CHATTAWAY), 1823.

13 VI

$C_{13}H_{11}O_2NClBrS$ *p*-Bromobenzenesulphontolylchloroamides (BAXTER and CHATTAWAY), 1823.

$C_{13}H_{11}O_2NClBrS$ *p*-Chlorobenzenesulphonbenzylbromoamide (Baxter and Chattaway), 1818.

p-Chlorobenzenesulphon-*p*-tolylbromoamide (Baxter and Chattaway), 1823.

$C_{13}H_{11}O_2NClIS$ *p*-Iodobenzenesulphontolylchloroamides (Baxter and Chattaway), 1823.

C_{14} Group.

$C_{14}H_8O_4$ 4:3-β-Naphthapyrone-4-carboxylic acid, and its silver salt (Dey), 1645.

$C_{14}H_{10}O_2$ 4-Methyl-1:2-α-naphthapyrone, and its salts (Ghosh), 1604.

$C_{14}H_{10}S$ 3-Thiolphenanthrene (Field), 1214.

$C_{14}H_{12}O_3$ β-2-Hydroxy-1-naphthylcrotonic acid ($\frac{1}{2}H_2O$) (Dey), 1630.

$C_{14}H_{12}N_4$ *s*-2-Pyridyl-2-quinolylhydrazine (Fargher and Furness), 696.

$C_{14}H_{14}O$ *l*-Phenyl-*p*-tolylcarbinol, preparation of, and its hydrochloride (Cohen, Marshall, and Woodman), 894.

$C_{14}H_{14}O_4$ Ethyl 8-methylcoumarin-4-acetate (Dey), 1637.

$C_{14}H_{14}O_5$ Ethyl β-2:6-dihydroxy-*p*-tolylglutaconate (Dey), 1638.

Ethyl 7-ethoxy-γ-benzopyrone-2-carboxylate (Sirker), 1246.

Methyl 5-methoxy-7-methylcoumarin-4-acetate (Dey), 1638.

$C_{14}H_{14}O_6$ Methyl 7:8-dimethoxycoumarin-4-acetate (Dey), 1641.

$C_{14}H_{15}N$ *dl*-Tetrahydro-β-naphthaquinaldine, resolution of, and its salts (Gibson and Simonsen), 1148.

$C_{14}H_{16}O_2$ α-*p*-Methoxyphenyl-ε-methyl-$\Delta^{\alpha\delta}$-hexadien-γ-one (Evens, Gifford, and Griffiths), 1676.

$C_{14}H_{16}N_2$ Benzylmethyl-*p*-phenylenediamine (Meldola and Hollely), 620.

$C_{14}H_{26}O_3$ *l*-Menthylideneglycerol methyl ether (Irvine, Macdonald, and Soutar), 347.

$C_{14}H_{28}O$ βζζι-Tetramethyldecan-ε-one (Parry), 114.

$C_{14}H_{30}O_2$ βζ-Dimethyl-γ-*iso*amylheptane-βγ-diol (Parry), 113.

14 III

$C_{14}H_8O_8N_4$ 2:2′-Dinitro-4:5:4′:5′-dimethylenetetraoxyazobenzene (G. M. and R. Robinson), 1761.

$C_{14}H_9O_2Cl$ Chloromethylnaphthapyrones (Dey), 1629, 1649.

$C_{14}H_9O_4N$ 6-Nitro-4-methyl-1:2-α-naphthapyrone (Dey), 1625.

$C_{14}H_9O_5N$ 2-*p*-Nitrobenzoyloxybenzaldehyde (Henderson and Heilbron), 1751.

$C_{14}H_{10}OS$ 2-Thiomethylnaphthapyrones (Ghosh), 1605; (Dey), 1626.

$C_{14}H_{11}O_2N$ 6-Amino-4-methyl-1:2-α-naphthapyrone (Dey), 1626.

4-Methyl-1:2-α-naphthapyrone (Dey), 1627.

Oxime of 2-thio-1-methyl-4:3-β-naphthapyrone (Dey), 1629.

$C_{14}H_{11}O_3Cl$ α-Chloro-β-2-hydroxy-1-naphthylcrotonic acid (Dey), 1630.

$C_{14}H_{11}O_3N$ β-4-Nitro-1-hydroxy-2-naphthylcrotonic acid (Dey), 1625.

$C_{14}H_{11}O_6Cl$ Diacetyl derivatives of chlorodihydroxymethylcoumarins (Dey), 1648.

$C_{14}H_{12}ON_2$ Methyl ether from substance $C_{13}H_{14}O_2N_2$ (Sen-Gupta), 1366.

$C_{14}H_{13}O_2N$ Phenylanilinoacetic acid, resolution of (McKenzie and Bate), 1682.

$C_{14}H_{13}O_2N$ Vanillylidene-*p*-aminophenol (Senier and Forster), 456.

$C_{14}H_{12}O_4Cl$ Ethyl 3-chloro-6:7-dimethylcoumarin-4-carboxylate (Dey), 1650.

Ethyl 6-chloro-7-methylcoumarin-4-acetate (Dey), 1643.

$C_{14}H_{14}O_2N_2$ Benzylmethyl-*p*-nitroaniline (MELDOLA and HOLLELY), 620.
$C_{14}H_{14}O_3N_2$ *p*-Azoxyanisole, absorption spectrum of (PURVIS), 664.
$C_{14}H_{15}O_3N_3$ Laevulic acid 2-quinolylhydrazone (FARGHER and FURNESS), 698.
$C_{14}H_{17}O_4N$ *o*-Nitrobenzoyl derivative of 1-methyl*cyclo*hexan-3-ol (CROSSLEY and RENOUF), 605.
$C_{14}H_{18}ON_2$ 3-Cyano-5-methyl-8-*iso*propylhexahydro-2-quinolone (SEN-GUPTA), 1362.
$C_{14}H_{19}ON$ *p*-Tolyldiacetonamine (EVENS, GIFFORD, and GRIFFITHS), 1674.
$C_{14}H_{19}O_3N$ 5-Methyl-8-*iso*propylhexahydro-2-quinolone-3-carboxylic acid (SEN-GUPTA), 1362.
$C_{14}H_{22}O_4Br_2$ Ethyl *aa'*-dibromo*cyclo*hexane-1:1-diacetate, preparation of (BEESLEY, INGOLD, and THORPE), 1093.

14 IV

$C_{14}H_7O_3N_2Cl_3$ Phthalyl-2:4:6-trichlorophenylhydrazide (CHATTAWAY and VONDERWAHL), 1508.
$C_{14}H_7O_3N_2Br_3$ Phthalyl-2:4:6-tribromophenylhydrazide (CHATTAWAY and VONDERWAHL), 1508.
$C_{14}H_8O_3N_2Cl_2$ Phthalyl-2:4-dichlorophenylhydrazide (CHATTAWAY and VONDERWAHL), 1506.
$C_{14}H_8O_3N_2Br_2$ Phthalyldibromophenylhydrazides (CHATTAWAY and VONDERWAHL), 1505.
$C_{14}H_9O_3N_2Cl$ Phthalylchlorophenylhydrazides (CHATTAWAY and VONDERWAHL), 1504.
$C_{14}H_9O_3N_2Br$ Phthalylbromophenylhydrazides (CHATTAWAY and VONDERWAHL), 1504.
$C_{14}H_9O_3N_2I$ Phthalyliodophenylhydrazides (CHATTAWAY and VONDERWAHL), 1505.
$C_{14}H_{12}ONCl$ Anisylidenechloroanilines, polymorphic (SENIER and FORSTER), 1170.
$C_{14}H_{12}ONBr$ Anisylidenebromoanilines (SENIER and FORSTER), 1171.
$C_{14}H_{12}O_2NCl$ Vanillylidene-*p*-chloroanilines, polymorphic (SENIER and FORSTER), 455.
$C_{14}H_{12}O_2NBr$ Vanillylidenebromoanilines, polymorphic (SENIER and FORSTER), 456.

14 V

$C_{14}H_7O_3N_2ClBr_2$ Phthalylchlorodibromophenylhydrazides (CHATTAWAY and VONDERWAHL), 1508.
$C_{14}H_7O_3N_2Cl_2Br$ Phthalyldichlorobromohydrazides (CHATTAWAY and VONDERWAHL), 1508.
$C_{14}H_8O_2N_2ClBr$ Phthalylchlorobromophenylhydrazides (CHATTAWAY and VONDERWAHL), 1506.

C_{15} Group.

$C_{15}H_8O_3$ 5-Hydroxy-2-keto*peri-peri*naphthindenofuran, and its sodium salt (DEY), 1631.
$C_{15}H_8O_8$ *iso*Quercetone, preparation and structure of (NIERENSTEIN), 869.
$C_{15}H_{10}O_2$ Flavone, occurrence of, as the farina of *Primula* (MÜLLER), 872.
7-Hydroxy-3-phenyl-γ-benzopyrone (+ H_2O) (JACOBSON and GHOSH), 1057.
$C_{15}H_{10}O_4$ Naphthapyroneacetic acids (DEY), 1623.
$C_{15}H_{12}O$ 2-Methyl-4-methylene-1:4-*a*-naphthapyranol, (+ $\frac{1}{2}H_2O$) and its salts (GHOSH), 741.
$C_{15}H_{12}O_3$ *o*-Hydroxydibenzoylmethane (MÜLLER), 876.
$C_{15}H_{12}O_5$ β-2-Hydroxy-1-naphthylglutaconic acid (DEY), 1628.

$C_{15}H_{12}S$ 3-Methylthiolphenanthrene (Field), 1215.

$C_{15}H_{14}O$ *p*-Tolyl benzyl ketone (Turner), 1462.

$C_{15}H_{14}O_2$ Phenyl-*p*-tolylacetic acid, racemisation of (McKenzie and Widdows), 702.

$C_{15}H_{14}O_6$ Ethyl 7-acetoxycoumarin-4-acetate (Dey), 1633.

$C_{15}H_{16}O$ α-Phenyl-η-methyl-$\Delta^{\alpha\gamma\zeta}$-octatrien-ε-one (Evens, Gifford, and Griffiths), 1676.

Phenyl-*p*-tolylmethylcarbinol, preparation of (Cohen, Marshall, and Woodman), 894.

$C_{15}H_{16}O_4$ 6-Carbethoxy-4:5:7-trimethylcoumarin (Jordan and Thorpe), 400.

Ethyl 3-carboxy-β:4:6-trimethylcoumarinate (Jordan and Price), 401.

Ethyl 6:7-dimethylcoumarin-4-acetate (Dey), 1639.

$C_{15}H_{20}O_4$ Ethyl methoxy-β-methoxy-α-benzylcrotonate (Lapworth and Mellor), 1278.

$C_{15}H_{22}O_7$ Dimethyl salicin (Haworth), 14.

15 III

$C_{15}H_9O_6N$ 6-Nitro-1:2-α-naphthapyrone-4-acetic acid (Dey), 1624.

$C_{15}H_{10}O_2S$ 2-Benzoyl-3-oxy(1)thionaphthen (Smiles and Ghosh), 1381.

$C_{15}H_{10}O_4S$ 3-Phenanthraquinonyl methyl sulphone (Field), 1215.

$C_{15}H_{11}O_3N$ 1:2-α-Naphthapyrone-4-acetamide (Dey), 1624.

$C_{15}H_{11}O_7N$ Aminomorin, and its hydriodide (Perkin and Watson), 209.

$C_{15}H_{12}O_5N_4$ 2-*p*-Nitrobenzoyloxybenzaldehydesemicarbazone, and its hydrochloride (Henderson and Heilbron), 1751.

$C_{15}H_{12}N_2Cl_2$ Cinnamaldehyde-2:4-dichlorophenylhydrazone (Chattaway and Pearce), 34.

$C_{15}H_{13}O_3N$ Anisylideneaminobenzoic acids, polymorphic (Senier and Forster), 1172.

$C_{15}H_{13}O_3N_3$ *o*-Benzoyloxybenzaldehydesemicarbazone, and its dihydrochloride (Henderson and Heilbron), 1751.

$C_{15}H_{13}O_4N$ Vanillylideneaminobenzoic acids, polymorphic (Senier and Forster), 457.

$C_{15}H_{13}N_3S$ Anhydride of acetyl derivative of diphenylthiosemicarbazide (McKee), 1137.

$C_{15}H_{15}O_2N$ Vanillylidenetoluidines, polymorphic (Senier and Forster), 452.

$C_{15}H_{15}O_3N$ Vanillylideneanisidines, polymorphic (Senier and Forster), 456.

$C_{15}H_{15}O_6N$ Ethyl 6-nitro-4:5:7-trimethylcoumarin-8-carboxylate (Jordan and Thorpe), 406.

$C_{15}H_{16}ON_2$ Benzo-*p*-amino-β-phenylethylamide, preparation of, and its derivatives (King), 225.

$C_{15}H_{16}OBr_6$ α-Phenyl-η-methyl-$\Delta^{\alpha\gamma\zeta}$-octatrien-ε-one hexabromide (Evens, Gifford, and Griffiths), 1676.

$C_{15}H_{16}O_3S$ Ethyl 2-thio-2:7-dimethylcoumarin-4-acetate (Dey), 1639.

$C_{15}H_{17}O_2N_3$ Ethyl acetoacetate 2-quinolylhydrazone (Farghер and Furness), 699.

$C_{15}H_{17}O_4N$ Ethyl 7-dimethylaminocoumarin-4-acetate (Dey), 1643.

$C_{15}H_{19}ON$ Anilide of *iso*propyldihydroresorcin (Crossley and Pratt), 173.

$C_{15}H_{19}O_4N$ *o*-Nitrobenzoyl derivative of 1:1-dimethyl*cyclo*hexanol (Crossley and Renouf), 604.

$C_{15}H_{25}O_3N$ Methyl α-bornyl succinamate (Cohen, Marshall, and Woodman), 890.

15 IV

$C_{15}H_{10}O_2N_2Br_2$ Phthalyl-3:5-dibromotolylhydrazides (CHATTAWAY and VONDERWAHL), 1509.

$C_{15}H_{15}ONS$ Benzo-*p*-thiol-β-phenylethylamide (KING), 227.

$C_{15}H_{15}ON_3S$ Acetyl derivatives of diphenylthiosemicarbazide (McKEE), 1136.

15 V

$C_{15}H_{16}ON_2ClS$ Substance, and its salts, from diphenylthiosemicarbazide and acetyl chloride (McKEE), 1135.

C_{16} Group.

$C_{16}H_8O_5$ 4-Hydroxy-6:11-diketo-ββ-benznaphthadioxin, and its salts (GHOSH), 1595.

$C_{16}H_{10}O_2$ 4′-Keto-2:3-indeno-1:4-benzopyranol (+ ½H_2O) (SASTRY and GHOSH), 1445.

Methyl ether of 5-hydroxy-2-keto*peri-peri*naphthindenofuran (DEY), 1631.

$C_{16}H_{10}O_4$ 2′:4′-Dihydroxy-1:3-diketo-2-benzylidenehydrindene (+ H_2O) (SASTRY and GHOSH), 1446.

7-Hydroxy-4′-keto-2:3-indeno-1:4-benzopyranol (+ 4H_2O) (SASTRY and GHOSH), 1447.

$C_{16}H_{12}O_3$ Diphenylsuccinic anhydride (WREN and STILL), 1457.

7-Hydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1053.

$C_{16}H_{12}O_4$ 5:7- and 7:8-Dihydroxy-3-phenyl-2-methyl-γ-benzopyrones (JACOBSON and GHOSH), 1055.

Ethyl 4:3-β-naphthapyrone-4-carboxylate (DEY), 1645.

$C_{16}H_{14}O_4$ Diphenylsuccinic acids, stereoisomeric (WREN and STILL), 444, 1449.

d-Diphenylsuccinic acid, preparation of, from -phenylchloroacetic acid (McKENZIE, DREW, and MARTIN), 26.

1:2:10-Trihydroxy-5-keto-10-ethyldihydroanthracene (SIRKER), 1243.

$C_{16}H_{16}O_7$ 6-Carboxy-4-carbethoxy-2:3:5-trimethylcoumarilic acid, and its silver salt (JORDAN and THORPE), 403.

$C_{16}H_{18}O_7$ 3-Carboxy-5-carbethoxy-β:4:6-trimethylcoumarinic acid (JORDAN and THORPE), 400.

$C_{16}H_{22}O_2$ Benzoyl derivative of 1-*iso*propyl*cyclo*hexan-3-ol (CROSSLEY and PRATT), 174.

16 III

$C_{16}H_9O_2Cl$ 4′-Keto-2:3-indeno-1:4-benzopyranol anhydrohydrochloride (+ H_2O) (SASTRY and GHOSH), 1445.

$C_{16}H_9O_3Cl$ 7-Hydroxy-4′-keto-2:3-indeno-1:4-benzopyranol anhydrohydrochloride (+ 3½H_2O) (SASTRY and GHOSH), 1447.

$C_{16}H_{10}O_5N_4$ 2:4-Dinitro-5-hydroxybenzeneazo-β-naphthol (MORGAN and PORTER), 659.

$C_{16}H_{10}O_8N_2$ 4:5:4′:5′-Dimethylenetetraoxyazobenzene-2:2′-dicarboxylic acid (G. M. and R. ROBINSON), 1759.

2:2′-Dinitro-4:5:4′:5′-dimethylenetetraoxystilbene (G. M. and R. ROBINSON), 1759.

$C_{16}H_{11}O_4N_3$ Nitrohydroxybenzeneazo-β-naphthols, and their salts (MORGAN and PORTER), 652.

$C_{16}H_{12}OS$ 3-Acetylthiolphenanthrene (FIELD), 1216.

$C_{16}H_{13}ON$ 3:5-Diphenyl-4-methyl*iso*oxazole (MARSHALL), 519.

$C_{16}H_{13}ON_3$ Benzoyl-2-quinolylhydrazine (FARGHER and FURNESS), 698.

$C_{16}H_{13}O_2Br$ Bromodibenzoylethane (MARSHALL), 519.
$C_{16}H_{13}O_3N$ Acetyl derivative of 6-amino-4-methyl-1:2-α-naphthapyrone (DEY), 1626.
$C_{16}H_{13}O_3N_3$ Phthaliminoacetyl phenylhydrazide (BRADSHAW, STEPHEN, and WEIZMANN), 808.
$C_{16}H_{13}O_4N$ *p*-Nitrobenzoate of β-phenylpropyl alcohol (COHEN, MARSHALL, and WOODMAN), 899.
$C_{16}H_{16}O_8N_4$ 2:2′-Dinitro-4:5:4′:5′-tetramethoxyazobenzene (G. M. and R. ROBINSON), 1756.
$C_{16}H_{17}ON$ Anisylidenexylidines, polymorphic (SENIER and FORSTER), 1169.
$C_{16}H_{17}ON_3$ Semicarbazone of benzylacetophenone (JACOBSON and GHOSH), 962.
$C_{16}H_{17}O_2N$ Vanillylidenexylidenes, polymorphic (SENIER and FORSTER), 454.
Anil of *cis-cyclo*hexane-*spiro-cyclo*propane-1:2-dicarboxylic acid (BEESLEY, INGOLD, and THORPE), 1098.
$C_{16}H_{17}O_{10}N_5$ *N*-2:2′-Trinitro-4:5:4′:5′-tetramethoxyhydrazobenzene (G. M. and R. ROBINSON), 1758.
$C_{16}H_{18}ON_2$ Acetyl derivative of benzylmethyl-*p*-phenylenediamine (MELDOLA and HOLLELY), 620.
$C_{16}H_{18}O_3N_2$ *p*-Azoxyphenetole, absorption spectrum of (PURVIS), 664.
$C_{16}H_{18}O_4N_2$ Azoveratrole (G. M. and R. ROBINSON), 1756.
$C_{16}H_{19}O_3N$ Anilic acid from *cis-cyclo*hexane-*spiro-cyclo*propane-1:2-dicarboxylic acid (BEESLEY, INGOLD, and THORPE), 1098.
$C_{16}H_{20}N_2S_2$ Di-β-phenylethylamine *p*-disulphide, and its salts (KING), 229.
$C_{16}H_{21}O_2N$ Benzoyl derivative of oxime of 1-*iso*propyl*cyclo*hexan-3-one (CROSSLEY and PRATT), 176.
$C_{16}H_{21}O_4N$ *o*-Nitrobenzoyl derivative of 1-*iso*propyl*cyclo*hexan-3-ol (CROSSLEY and PRATT), 174.
Aniline salt of lactone $C_{10}H_{14}O_4$ (BEESLEY, INGOLD, and THORPE), 1096.
$C_{16}H_{26}NBr$ γ-Phenylbutyltriethylammonium bromide (COHEN, MARSHALL, and WOODMAN), 901.
$C_{16}H_{28}NI$ *l*-γ-Phenylbutyltriethylammonium iodide (COHEN, MARSHALL, and WOODMAN), 902.

C_{17} Group.

$C_{17}H_4O_4$ Dihydroxy-3-benzyl-2-methyl-γ-benzopyrones (JACOBSON and GHOSH), 432.
$C_{17}H_{10}O_4$ Acetyl derivative of 5-hydroxy-2-keto*peri-peri*naphthindenofuran (DEY), 1631.
$C_{17}H_{12}O_4$ Benzoyl derivative of α-hydroxy-β-phenylcrotonolactone (HALL, HYNES, and LAPWORTH), 138.
$C_{17}H_{14}O_3$ 7-Hydroxy-3-benzyl-2-methyl-γ-benzopyrone($+\frac{1}{2}H_2O$) (JACOBSON and GHOSH), 428.
Benzyl derivative of α-hydroxy-β-phenylcrotonolactone (HALL, HYNES, and LAPWORTH), 139.
$C_{17}H_{14}O_4$ Ethyl naphthapyroneacetates (DEY), 1624.
$C_{17}H_{15}N_3$ Acetophenone-2-quinolylhydrazone (FARGHER and FURNESS), 697.
$C_{17}H_{18}O_2$ Ethyl *d*-phenyl-*p*-tolylacetate (MCKENZIE and WIDDOWS), 714.
$C_{17}H_{20}O_4$ 3:4:3′:4′-Tetramethoxydiphenylmethane (ROBINSON), 273.

17 III

$C_{17}H_{11}O_2N_3$ Phthalyl-2-quinolylhydrazide (FARGHER and FURNESS), 699.
$C_{17}H_{13}O_5N$ Anilide of 7:8-dihydroxycoumarin-4-acetic acid (DEY), 1640.

$C_{17}H_{14}OS_2$ Thio-derivative from 7-hydroxy-3-benzyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 430.

$C_{17}H_{14}O_3S$ Ethyl 2-thio-1:2-α-naphthapyrone-4-acetate (DEY), 1627.

$C_{17}H_{15}O_2Br$ Bromodibenzoylpropane (MARSHALL), 519.

$C_{17}H_{15}O_4I$ 5:7-Dihydroxy-2-*p*-hydroxyphenyl-4-ethyl-1:4-benzopyranol anhydroiodide (+ H_2O) (WATSON, SEN, and MEDHI), 1487.

$C_{17}H_{15}O_5I$ 5:7-Dihydroxy-2-*mp*-dihydroxyphenyl-4-ethyl-1:4-benzopyranol anhydrohydriodide (WATSON, SEN, and MEDHI), 1485.

$C_{17}H_{16}ON_2$ Phenylhydrazone of 6:7-dimethylcoumarin (GHOSH), 1601.

$C_{17}H_{16}O_{13}N_4$ 2:6:2′:6′-Tetranitro-3:4:3′:4′-tetramethoxydiphenylmethane (ROBINSON), 275.

$C_{17}H_{18}ON_2$ Acetyl*iso*propylidenebenzidine, and its salts (TURNER), 1499.

$C_{17}H_{18}O_2N_2$ Acetyl derivative of benzo-*p*-amino-β-phenylethylamide (KING), 226.

$C_{17}H_{18}O_8N_2$ 6:6′-Dinitro-3:4:3′:4′-tetramethoxydiphenylmethane (ROBINSON), 274.

$C_{17}H_{19}ON$ Anisylidene-ψ-cumidine (SENIER and FORSTER), 1170.

$C_{17}H_{19}O_2N$ Vanillylidene-ψ-cumidines, polymorphic (SENIER and FORSTER), 455.

17 IV

$C_{17}H_{14}O_3N_2Cl_2$ Diacetyl derivative of *s*-di-2-chloro-4-hydroxyphenylcarbamide (HURST and THORPE), 941.

$C_{17}H_{18}O_3N_2Cl_2$ *s*-Di-2- and -3-chloro-4-ethoxyphenylcarbamides (HURST and THORPE), 940.

C_{18} Group.

$C_{18}H_{10}O_6$ Acetyl derivative of 4-hydroxy-6:11-diketo-ββ-benznaphthdioxin (GHOSH), 1595.

$C_{18}H_{12}O_8$ 2:3:2′:3′:2″:3″-Hexahydroxytriphenoquinone (NIERENSTEIN), 1218.

$C_{18}H_{14}O_4$ Acetyl derivative of 7-hydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1053.

$C_{18}H_{14}O_8$ 2:3:2′:3′:4′:2″:3″:4″-Octahydroxy-1:4-diphenylbenzene (+ H_2O) (NIERENSTEIN), 1219.

$C_{18}H_{16}O_3$ 7-Hydroxy-3-benzyl-2:5-dimethyl-γ-benzopyrone (JACOBSON and GHOSH), 433.

Ethyl ether (+ $\frac{1}{2}H_2O$) of 7-hydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1053.

Methyl ether of 7-hydroxy-3-benzyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 429.

$C_{18}H_{18}O_4$ 10-Hydroxy-5-keto-1:2-dimethoxy-10-ethyldihydroanthracene (SIRKER), 1213.

Methyl diphenylsuccinates (WREN and STILL), 1453.

2:3:6:7-Tetramethoxyanthracene (ROBINSON), 272.

$C_{18}H_{18}O_7$ 6-Ethyl 8-hydrogen 3-acetyl-4:5:7-trimethylcoumarin-6:8-dicarboxylate (JORDAN and THORPE), 399.

$C_{18}H_{19}N$ Di-β-phenylethylacetonitrile (COHEN, MARSHALL, and WOODMAN), 896.

$C_{18}H_{20}O_4$ 1:2:5:10-Tetrahydroxy-5:10-diethyldihydroanthracene (SIRKER), 1245.

2:3:6:7-Tetramethoxy-9:10-dihydroanthracene (ROBINSON), 270.

$C_{18}H_{20}O_6$ Ethyl 4 4:5:7-trimethylcoumarin-6:8-dicarboxylate (JORDAN and THORPE), 398.

$C_{18}H_{20}O_8$ α-Acetyl-3-carboxy-5-carbethoxy-β-4:6-trimethylcoumarinic acid (JORDAN and THORPE), 399.

$C_{18}H_{22}O_7$ 3:5-Dicarbethoxy-β-4:6-trimethylcoumarinic acid (JORDAN and THORPE), 399.

$C_{18}H_{30}O_8$ Ethyl ethylidenebis-γ-ethoxyacetoacetate (BRADSHAW STEPHEN, and WEIZMANN), 809.

18 III

$C_{18}H_{13}O_3N_3$ 1-Phenyl-3-phthaliminomethyl-5-pyrazolone (BRADSHAW, STEPHEN, and WEIZMANN), 807.

$C_{18}H_{15}O_2N$ Vanillylidenenaphthylamines, polymorphic (SENIER and FORSTER), 459.

$C_{18}H_{15}O_3N$ Anilide of 7-methylcoumarin-4-acetic acid (DEY), 1635.

$C_{18}H_{15}O_4N_3$ 1-Phenyl-3-phthalaminomethyl-5-pyrazolone (BRADSHAW, STEPHEN, and WEIZMANN), 807.

$C_{18}H_{18}ON_2$ Phenylhydrazone of 4:6:7-trimethylcoumarin (GHOSH), 1602.

$C_{18}H_{18}O_8N_2$ 4:5:4′:5′-Tetramethoxyazobenzene-2:2′-dicarboxylic acid (G. M. and R. ROBINSON), 1755.

$C_{18}H_{19}O_6Br$ Ethyl 3-bromo-4:5:7-trimethylcoumarin-6:8-dicarboxylate (JORDAN and THORPE), 403.

18 IV

$C_{15}H_{15}O_2N_2Cl$ 2-Chloro-4-ethoxybenzeneazo-β-naphthol (HURST and THORPE), 940.

$C_{18}H_{19}O_2NS_2$ Benzo-*p*-xanthyl-β-phenylethylamide, preparation of (KING), 226.

C_{19} Group.

$C_{19}H_{16}O_2$ 3-Benzyl-2:7-dimethyl-γ-benzopyrone, preparation of (JACOBSON and GHOSH), 431.

$C_{19}H_{16}O_4$ Acetyl derivative of 7-hydroxy-3-benzyl-2-methyl-γ-benzopyrone ($+\frac{1}{2}H_2O$) (JACOBSON and GHOSH), 429.

$C_{19}H_{16}O_8$ *iso*Quercetone tetramethyl ether (NIERENSTEIN), 870.

$C_{19}H_{18}O_3$ Ethyl ether of 7-hydroxy-3-benzyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 429.

$C_{19}H_{36}O_{11}$ Heptamethyl sucrose (HAWORTH), 12.

19 III

$C_{19}H_{19}O_4N$ Phenylurethanes, isomeric, of cinnamylideneglycerol (PEACOCK), 817.

C_{20} Group.

$C_{20}H_{12}O_2$ Di-αβ-naphthdioxin, and its salts (GHOSH), 1592.

$C_{20}H_{12}O_3$ 2′-Hydroxy-1:3-diketo-2-naphthylidenehydrindene (SASTRY and GHOSH), 1448.

4′-Keto-2:3-indeno-1:4-naphthapyranol ($+H_2O$), (SASTRY and GHOSH), 1449.

$C_{20}H_{14}O$ 2-Phenyl-4-methylene-1:4-α-naphthapyranol, and its salts (GHOSH), 743.

$C_{20}H_{14}O_2$ 3-Phenyl-2-methyl-1:4-α-naphthapyrone (JACOBSON and GHOSH), 1055.

$C_{20}H_{14}O_5$ Acetyl derivative of 2′:4′-dihydroxy-1:3-diketo-2-benzylidenehydrindene ($+\frac{1}{2}H_2O$) (SASTRY and GHOSH), 1446.

$C_{20}H_{16}O_3$ 7-Hydroxy-2-phenyl-3-benzyl-γ-benzopyrone (JACOBSON and GHOSH), 961.

$C_{20}H_{16}O_4$ *o*-1-Ethoxynaphthoylbenzoic acid (COPISAROW and WEIZMANN), 883.

$C_{20}H_{16}O_6$ Acetyl derivatives of 5:7- and 7:8-dihydroxy-3-phenyl-2-methyl-γ-benzopyrones (JACOBSON and GHOSH), 1056.

$C_{20}H_{18}O_2$ *d*-αβ-Dihydroxy-αββ-triphenylethane (MCKENZIE, DREW, and MARTIN), 31.

$C_{20}H_{18}O_4$ Acetyl derivative of 7-hydroxy-3-benzyl-2:5-dimethyl-γ-benzopyrone (JACOBSON and GHOSH), 433.

$C_{20}H_{18}O_8$ 7:8-Methylenedioxy-3:5:3′:4′-tetramethoxyflavone (NIERENSTEIN), 871.

$C_{20}H_{20}O_6$ Ethyl ether of 7:8-dihydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1055.

$C_{20}H_{22}O_4$ Ethyl diphenylsuccinates (WREN and STILL), 1455.

$C_{20}H_{22}O_5$ 1-Hydroxy-1-homoveratryl-5:6:dimethoxyindene (PYMAN), 187.

$C_{20}H_{22}O_7$ Ethyl 3-acetyl-4:5:7-trimethylcoumarin-6:8-dicarboxylate (JORDAN and THORPE), 397.

$C_{20}H_{24}O_4$ 5:10-Dihydroxy-1:2-dimethoxy-5:10-diethyldihydroanthracene (SIRKER), 1244.

$C_{20}H_{24}O_8$ α-Acetyl-3:5-dicarbethoxy-β:4:6-trimethylcoumarinic acid (JORDAN and THORPE), 398.

$C_{20}H_{34}O_{10}$ Ethyl αζ-dimethoxyhexane-ββεε-tetracarboxylate (SIMONSEN), 790.

$C_{20}H_{38}O_{11}$ Octamethyl sucrose (HAWORTH), 12.

20 III

$C_{20}H_{11}O_3Cl$ 4′-Keto-2:3-indeno-1:4-naphthapyranol anhydrohydrochloride (SASTRY and GHOSH), 1448.

$C_{20}H_{14}O_6Br_2$ Bromoacetyl derivative of 2′:4′-dihydroxy-1:3-diketo-2-benzylidenehydrindene (SASTRY and GHOSH), 1446.

$C_{20}H_{18}O_2N_2$ Vanillylidenebenzidines, polymorphic (SENIER and FORSTER), 458.

$C_{20}H_{19}O_7Br_2$ Dibromomorin pentamethyl ether, and its salts (PERKIN and WATSON), 208.

$C_{20}H_{19}O_9N$ Nitromorin pentamethyl ether (PERKIN and WATSON), 207.

$C_{20}H_{20}O_3N_2$ 2:6-Diethoxybenzeneazo-β-naphthol (TURNER), 472.

$C_{20}H_{21}O_4N$ Papaverine, reduction products of (PYMAN), 176.

$C_{20}H_{21}O_4Cl$ 1-Chloro-1-homoveratryl-5:6-dimethoxyindene (PYMAN), 187.

$C_{20}H_{21}O_7N$ Aminomorin pentamethyl ether, and its platinichloride (PERKIN and WATSON), 208.

$C_{20}H_{23}O_4N$ Pavine, constitution of (PYMAN), 176.

$C_{20}H_{23}O_7I$ 3:5:7-Trihydroxy-2-*mp*-dihydroxyphenyl-4-ethyl-1:4-benzopyranol anhydrohydriodide trimethyl ether (WATSON, SEN, and MEDHI), 1482.

$C_{20}H_{28}O_5N_2$ Anhydride of nitrocamphor (LOWRY and STEELE), 1041.

$C_{20}H_{30}O_4N_2$ Bisnitroso-derivative of Δ^1-menthenone (ROBERTS), 1466.

$C_{20}H_{38}O_3S$ Di-*l*-menthyl sulphite (KENYON and PICKARD), 45.

20 IV

$C_{20}H_{10}O_4N_2S$ Dinitro-*n*- and *iso*dinaphthathioxins (GHOSH and SMILES), 1147.

$C_{20}H_{10}O_6N_2S$ Dinitrodinaphthathioxin oxides (GHOSH and SMILES), 1146.

20 V

$C_{20}H_{16}O_4NClS$ Chloronitrodinaphthathioxin oxide (Ghosh and Smiles), 1146.

C_{21} Group.

$C_{21}H_{16}O_3$ 3-Benzyl-2-methyl-1:4-α-naphthapyrone (Jacobson and Ghosh), 432.

Dibenzoylphenylmethane (Marshall), 520.

$C_{21}H_{18}O$ *r*-Phenyl-*p*-tolylacetophenone (McKenzie and Widdows), 714.

$C_{21}H_{18}O_6$ Acetyl derivatives of dihydroxy-3-benzyl-2-methyl-γ-benzopyrones (Jacobson and Ghosh), 433.

$C_{21}H_{22}O_4$ Dibenzoyl derivative of 1-methyl*cyclo*hexane-3:5-diol (Crossley and Renouf), 606.

$C_{21}H_{22}O_7$ Substance, from oxidation of 1-homoveratryl-1:5:6-trimethoxyindene (Pyman), 186.

$C_{21}H_{24}O_5$ 1-Homoveratryl-1:5:6-trimethoxyindene (Pyman), 185.

$C_{21}H_{24}O_7$ Substance, from oxidation of 1-homoveratryl-1:5:6-trimethoxyindene (Pyman), 186.

$C_{21}H_{24}O_8$ Acid, from oxidation of 1-homoveratryl-1:5:6-trimethoxyindene (Pyman), 186.

$C_{21}H_{24}O_9$ Acid, from oxidation of 1-homoveratryl-1:5:6-trimethoxyindene (Pyman), 186.

$C_{21}H_{42}O_2$ Heneicosoic acid, and its silver salt (Le Sueur and Withers), 736.

$C_{21}H_{42}O_3$ α-Hydroxyheneicosoic acid (Le Sueur and Withers), 739.

21 III

$C_{21}H_{12}O_2N_2$ 2:3-Methylenedioxyphenanthraphenine (G. M. and R. Robinson), 1761.

$C_{21}H_{13}O_6Cl$ Substance, from 3:5:7-triethoxy-4-*o*-methoxyphenyl-2-*mp*-diethoxyphenyl-1:4-benzopyranol anhydrohydrochloride (Watson, Sen, and Medhi), 1484.

$C_{21}H_{14}OS$ 3-Benzoylthiolphenanthrene (Field), 1217.

$C_{21}H_{15}ON$ 3:4:5-Triphenyl*iso*oxazole (Marshall), 521.

$C_{21}H_{15}O_3N$ Anilide of 1:2-α-naphthapyrone-4-acetic acid (Dey), 1624.

Benzoyl derivative of 6-amino-4-methyl-1:2-α-naphthapyrone (Dey), 1626.

$C_{21}H_{17}O_2N$ Dibenzoylphenylmethaneoxime (Marshall), 521.

$C_{21}H_{17}O_5N_3$ Ethyl 1-phenyl-3-phthaliminomethyl-5-pyrazolone-4-carboxylate (Bradshaw, Stephen, and Weizmann), 807.

$C_{21}H_{23}O_6I$ 3:5:7-Trimethoxy-2-*op*-dimethoxyphenyl-4-methyl-1:4-benzopyranol anhydrohydriodide (Watson, Sen, and Medhi), 1485.

$C_{21}H_{26}O_3N_2$ Yohimbic acid, and its barium salt (Barger and Field), 1028.

$C_{21}H_{26}O_{10}N_2$ Substance, from oxidation of yohimbine (Barger and Field), 1028

$C_{21}H_{41}O_2Br$ α-Bromoheneicosoic acid (Le Sueur and Withers), 739.

$C_{21}H_{43}ON$ Heneicosoamide (Le Sueur and Withers), 738.

C_{22} Group.

$C_{22}H_{12}O_4$ Benzoyl derivative of 5-hydroxy-2-keto*peri-peri*naphthindenofuran (Dey), 1631.

$C_{22}H_{16}O_4$ 5:7- and 7:8-Dihydroxy-2-phenyl-3-benzyl-γ-benzopyrones (Jacobson and Ghosh), 963.

$C_{22}H_{18}O_3$ 7-Hydroxy-2-phenyl-3-benzyl-5-methyl-γ-benzopyrone (Jacobson and Ghosh), 965.

$C_{22}H_{18}N_2$ 1:3:5-Triphenyl-4-methylpyrazole (Marshall), 518.

$C_{22}H_{20}O$ *p*-Tolyl *aβ*-diphenylethyl ketone (TURNER), 1463.
$C_{22}H_{22}O_6$ Substance, from mangostin and hydriodic acid (HILL), 600.
$C_{22}H_{24}O_4$ Dibenzoyl derivative of 1:1-dimethyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 604.
$C_{22}H_{44}O_2$ Methyl henicosoate (LE SUEUR and WITHERS), 738.

22 III

$C_{22}H_{14}O_2S$ 2:2-Dibenzoyl-3-oxy(1)thionaphthen (SMILES and GHOSH), 1380.
$C_{22}H_{17}O_3N$ 9-Ethylcarbazole-3-phthaloylic acid, and its silver salt (COPISAROW and WEIZMANN), 884.
$C_{22}H_{31}ON$ Substance, from substance $C_{23}H_{22}O_2N_2$ (SEN-GUPTA), 1365.
$C_{22}H_{24}O_2N_2$ Diacetyl*iso*propylidenebenzidine (TURNER), 1497.
Dianilide of *trans-cyclo*hexane-*spiro-cyclo*propane-1:2-dicarboxylic acid (BEESLEY, INGOLD, and THORPE), 1097.
$C_{22}H_{26}O_2N_2$ Dianilide of *α*-hydroxy*cyclo*hexane-1:1-diacetic acid (BEESLEY, INGOLD, and THORPE), 1096.
$C_{22}H_{27}O_4N$ *N*-Methylpavinemethine(+ $2H_2O$), and its salts (PYMAN), 182.
$C_{22}H_{27}O_7Cl$ Ethyl 2-chloro-*α*-acetyl-3:5-dicarbethoxy-*β*:4:6-trimethylcinnamate (JORDAN and THORPE), 402.
$C_{22}H_{27}O_6N$ Acid, and its salts, from oxidation of *N*-methylpavinemethine (PYMAN), 184.
$C_{22}H_{28}O_3N_2$ Yohimbine (BARGER and FIELD), 1026.

22 IV

$C_{22}H_{13}O_3NS$ Nitroacetoxydinaphthathioxin (GHOSH and SMILES), 1147.
$C_{22}H_{24}O_2N_2Br_4$ Tetrabromo-derivative of diacetyl*iso*propylidenebenzidine (TURNER), 1498.
$C_{22}H_{28}O_4N_2Br_2$ Dibromoyohimbine, and its hydrobromide (BARGER and FIELD), 1027.
$C_{22}H_{28}O_6N_2S$ Yohimbinesulphonic acid (BARGER and FIELD), 1027.
$C_{22}H_{29}O_4N_2Br$ Bromoyohimbine, and its hydrobromide (BARGER and FIELD), 1026.

C_{23} Group.

$C_{23}H_{16}O_4$ Benzoyl derivative of 7-hydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1053.
$C_{23}H_{16}O_{12}$ Tetra-acetyl*iso*quercetone (NIERENSTEIN), 871.
$C_{23}H_{20}N_2$ 1:3:5-Triphenyl-4-ethylpyrazole (MARSHALL), 520.
$C_{23}H_{20}O_5$ 7-Hydroxy-3-*m*-hydroxyphenoxy-3-benzyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 431.
$C_{23}H_{24}O_6$ Mangostin (HILL), 595.
$C_{23}H_{28}O_4$ Dibenzoyl derivative of 1-*iso*propyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 608.
Dibenzoyl derivative of 1:1:2-trimethyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 607.

23 III

$C_{23}H_{22}O_2N_2$ Substance, from dibenzylidene*cyclo*hexanone and cyanoacetamide (SEN-GUPTA), 1365.
$C_{23}H_{22}O_{14}N_4$ Tetranitroluteolin tetraethyl ether (PERKIN and WATSON), 202.
$C_{23}H_{24}O_2Br_4$ Tetrabromoluteolin tetraethyl ether (PERKIN and WATSON), 203.
$C_{23}H_{25}O_6Br$ Bromoluteolin tetraethyl ether, and its salts (PERKIN and WATSON), 203.

$C_{23}H_{27}O_4I$ 5:7-Diethoxy-2-*p*-ethoxyphenyl-4-ethyl-1:4-benzopyranol anhydrohydriodide (WATSON, SEN, and MEDHI), 1486.

$C_{23}H_{29}O_7Cl$ 3:5:7-Trihydroxy-2-*mp*-dihydroxyphenyl-4-ethyl-1:4-benzopyranol anhydrohydrochloride triethyl ether (WATSON, SEN, and MEDHI), 1481.

23 IV

$C_{23}H_{24}O_8NBr$ Bromo-6′-nitroluteolin tetraethyl ether (PERKIN and WATSON), 203.

$C_{23}H_{26}O_6NBr$ Bromo-6′-aminoluteolin tetraethyl ether, and its salts (PERKIN and WATSON), 204.

$C_{23}H_{33}O_4N_2I$ Yohimbine methiodide (BARGER and FIELD), 1026.

C_{24} Group.

$C_{24}H_{18}O_3$ Benzoyl derivative of 7-hydroxy-3-benzyl-2-methyl-γ-benzopyrone (+ H_2O) (JACOBSON and GHOSH), 429.

$C_{24}H_{18}O_4$ Acetyl derivative of 7-hydroxy-2-phenyl-3-benzyl-γ-benzopyrone (JACOBSON and GHOSH), 962.

$C_{24}H_{22}O_2$ Di-*o*-xylylphthalide (COPISAROW and WEIZMANN), 882.

$C_{24}H_{28}O_4$ Ketone, from *Kaempferia ethelæ* (GOULDING and ROBERTS), 317.

$C_{24}H_{42}O_6$ Di-*l*-menthylamine tartrates, and their rotation (T. S. and D. C. PATTERSON), 150.

$C_{24}H_{42}O_{13}$ Anhydrobisdimethyloxy-γ-methylglucosideacetone (IRVINE, FYFE, and HOGG), 541.

24 III

$C_{24}H_{15}O_6Cl$ Dibenzoyl derivatives of chlorodihydroxymethylcoumarins (DEY), 1648.

$C_{24}H_{29}O_4N$ Oxime of ketone from *Kaempferia ethelæ* (GOULDING and ROBERTS), 318.

$C_{24}H_{40}O_2N_2$ *i*-Succinylbornylamide (COHEN, MARSHALL, and WOODMAN), 890.

C_{25} Group.

$C_{25}H_{28}O_6$ Dimethylmangostin (HILL), 599.

$C_{25}H_{28}O_{12}$ *iso*Dibenzoylglucoxylose (TUTIN), 7.

$C_{25}H_{30}O_2$ *l*-Bornyl *dl*-phenyl-*p*-tolylacetate, resolution of (MCKENZIE and WIDDOWS), 713.

$C_{25}H_{32}O_2$ *l*-Menthyl *r*-phenyl-*p*-tolylacetate, resolution of (MCKENZIE and WIDDOWS), 712.

$C_{25}H_{32}O_6$ 5:7-Diethoxy-2-*mp*-diethoxyphenyl-4-ethyl-1:4-benzopyranol (WATSON, SEN, and MEDHI), 1485.

25 III

$C_{25}H_{23}O_{10}Br$ Bromo-6′-hydroxyluteolin diethyl ether triacetate (PERKIN and WATSON), 205.

$C_{25}H_{27}O_6Br$ Acetyl derivative of bromo-6′-hydroxyluteolin tetraethyl ether (PERKIN and WATSON), 205.

$C_{25}H_{29}ON$ *dl*-Tetrahydro-β-naphthaquinaldino-*d*-methylenecamphor (GIBSON and SIMONSEN), 1157.

$C_{25}H_{31}O_6Cl$ 3:5:7-Trihydroxy-2-*mp*-dihydroxyphenyl-4-ethyl-1:4-benzopyranol anhydrohydrochloride tetraethyl ether (WATSON, SEN, and MEDHI), 1482.

$C_{25}H_{42}O_2N_2$ Methyl succinyl *dl*-bornylamide (COHEN, MARSHALL, and WOODMAN), 891.

C_{26} Group.

$C_{26}H_{18}O_2$ 2-Phenyl-3-benzyl-1:4-α-naphthapyrone ($\frac{1}{2}H_2O$) (JACOBSON and GHOSH), 964.

$C_{26}H_{20}O_6$ Acetyl derivatives of 5:7- and 7:8-dihydroxy-2-phenyl-3-benzyl-γ-benzopyrones (JACOBSON and GHOSH), 965.

$C_{26}H_{24}O_4$ Dibenzoyl derivative of 1-phenyl*cyclo*hexane-3:5-diol (CROSSLEY and RENOUF), 610.

$C_{26}H_{32}O_2$ Substance, from nitrosophenyldiacetonamine and sodium ethoxide (EVENS, GIFFORD, and GRIFFITHS), 675.

26 III

$C_{26}H_{22}O_6N_2$ Azine of *iso*quercetone tetramethyl ether (NIERENSTEIN), 870.

C_{27} Group.

$C_{27}H_{36}O_7$ 3:5:7-Triethoxy-2-*mp*-diethoxyphenyl-4-ethylbenzopyranol, and its salts (WATSON, SEN, and MEDHI), 1480.

27 III

$C_{27}H_{22}O_{10}N_2$ Ethyl bisphthaliminoacetylmalonate (BRADSHAW, STEPHEN, and WEIZMANN), 806.

C_{28} Group.

$C_{28}H_{16}O_4$ α-Naphthaphthalein (COPISAROW and WEIZMANN), 884.

$C_{28}H_{16}S$ Diphenanthryl 3-sulphide (FIELD), 1216.

$C_{28}H_{16}S_2$ Phenanthrene 3-disulphide (FIELD), 1215.

28 III

$C_{28}H_{24}O_2N_2$ Dianisylidenebenzidine (SENIER and FORSTER), 1172.

28 IV

$C_{28}H_{28}O_4N_2S_2$ Toluenesulphonamide derivative of benzylmethyl-*p*-phenylenediamine (MELDOLA and HOLLELY), 620.

C_{29} Group.

$C_{29}H_{28}N_2$ Substance, from semicarbazide hydrochloride and *p*-tolyl benzyl ketone (TURNER), 1462.

C_{30} Group.

$C_{30}H_{20}O_6$ Benzoyl derivative ($\frac{1}{2}H_2O$) of 7:8-dihydroxy-3-phenyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 1055.

$C_{30}H_{46}O_3$ Mudaric acid, and its silver salt (HILL and SIRKAR), 1440.

$C_{30}H_{48}O_2$ Mudarol (HILL and SIRKAR), 1439.

30 III

$C_{30}H_{17}O_4N$ 2:3:6:7-Diphthaloyl-9-ethylcarbazole (COPISAROW and WEIZMANN), 885.

$C_{30}H_{21}O_6N$ 9-Ethylcarbazole-3:6-diphthaloylic acid, and its silver salt (COPISAROW and WEIZMANN), 884.

$C_{30}H_{24}O_6N_4$ Phenylhydrazone of hexahydroxytriphenoquinone (NIERENSTEIN), 1219.

30 IV

$C_{30}H_{22}O_6N_4Br_2$ *p*-Bromophenylhydrazone of hexahydroxytriphenoquinone (NIERENSTEIN), 1219.

$C_{30}H_{28}O_2N_2S_2$ Dibenzodi-β-phenylethylamide *p*-disulphide (KING), 228.

C_{31} Group.

$C_{31}H_{22}O_6$ Benzoyl derivative of 7:8-dihydroxy-3-benzyl-2-methyl-γ-benzopyrone (JACOBSON and GHOSH), 433.

C_{32} Group.

$C_{32}H_{26}O_4$ Di-1-ethoxynaphthylphthalide (COPISAROW and WEIZMANN), 883.

$C_{32}H_{50}O_3$ Mudarol acetate (HILL and SIRKAR), 1439.

32 III

$C_{32}H_{38}O_7Cl_2$ 3:5:7-Triethoxy-4-*o*-methoxyphenyl-2-*mp*-diethoxyphenyl-1:4-benzopyranol anhydrohydrochloride (+ H_2O) (WATSON, SEN, and MEDHI), 1483.

C_{34} Group.

$C_{34}H_{30}O_{16}$ Octa-acetyl derivative of octahydroxy-1:4-diphenylbenzene (NIERENSTEIN), 1220.

$C_{34}H_{38}O_8$ *s*-Tetraveratrylethane (ROBINSON), 272.

34 III

$C_{34}H_{47}O_{11}N$ Aconitine, oxidation of (BARGER and FIELD), 231.

$C_{34}H_{47}O_{12}N$ Substance, from resin of *Calotropis gigantea* (HILL and SIRKAR), 1441.

C_{35} Group.

$C_{35}H_{56}O_3$ Mudarol *iso*valerate (HILL and SIRKAR), 1438.

C_{36} Group.

$C_{36}H_{24}O_6$ Benzoyl derivative of 7:8-dihydroxy-2-phenyl-3-benzyl-γ-benzopyrone (JACOBSON and GHOSH), 964.

36 III

$C_{36}H_{28}O_2N_2$ Di-9-ethylcarbazylphthalide (COPISAROW and WEIZMANN), 886.

C_{38} Group.

$C_{38}H_{60}O_3$ Akundaric acid, and its silver salt (HILL and SIRKAR), 1441.

$C_{38}H_{62}O_2$ Akundarol (HILL and SIRKAR), 1440.

C_{40} Group.

$C_{40}H_{64}O_3$ Akundarol acetate (HILL and SIRKAR), 1440.

C_{43} Group.

$C_{43}H_{70}O_3$ Akundarol *iso*valerate (HILL and SIRKAR), 1440.

C_{58} Group.

$C_{58}H_{42}O_4N_2$ Tri-9-ethylcarbazyldiphthalide (COPISAROW and WEIZMANN), 886.

C_{74} Group.

$C_{74}H_{38}O_{32}N_8$ Octa-*p*-nitrobenzoyl derivative of octahydroxy-1:4-diphenylbenzene (NIERENSTEIN), 1220.

ERRATA.

Vol. CV (Trans., 1914).

Page		
1938	Fig. 3.	The point representing the composition of the moist solid of Expt. 17 has been incorrectly plotted, the figures for CaO and N_2O_5 having been reversed.

Vol. CVII (Trans., 1915).

Page	Line				
351	7*	*after* "1911, **33**, 640,"		*insert* "1913, **35**, 1856, 1913."	
		"Morgan."		"Morgan."	
355	10—13	*for* 27·43	*read*	26·88	
		24·53		24·08	
		22·65		22·22	
630	10*	*for* "(iii)"	*read*	"(iv)."	
1684	8*	,, "preceding paper"	*read*	"succeeding paper."	
1821	8*	,, "$C_6H_5Cl.SO_2.NH.C_6H_4.NO_2$"	*read*	"$C_6H_4Cl.SO_2.NH.C_6H_4.NO_2$."	

* From bottom.